

Durham Research Online

Deposited in DRO:

18 November 2015

Version of attached file:

Accepted Version

Peer-review status of attached file:

Peer-reviewed

Citation for published item:

Cooper, S. and Slack, R. (2015) 'Reporting practice, impression management and company performance : a longitudinal and comparative analysis of water leakage disclosure.', *Accounting and business research.*, 45 (6-7). pp. 801-840.

Further information on publisher's website:

<http://dx.doi.org/10.1080/00014788.2015.1081554>

Publisher's copyright statement:

This is an Accepted Manuscript of an article published by Taylor Francis Group in *Accounting and Business Research* on 11/11/2015, available online at: <http://www.tandfonline.com/10.1080/00014788.2015.1081554>.

Additional information:

Use policy

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a [link](#) is made to the metadata record in DRO
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

Please consult the [full DRO policy](#) for further details.

Cooper, S. (Bristol University)

&

Slack, R. (Durham University)

Reporting practice, impression management and company performance: A longitudinal and comparative analysis of water leakage disclosure

Abstract

This paper aims to determine whether corporate reporting practice, consistent with impression management, changes depending upon company performance. A longitudinal analysis, rarely used in prior impression management research, enables changes in annual report disclosures, both narrative and visual, to be identified and considered relative to a company's performance. Our analysis is based upon the disclosure of leakage performance, a strategic and stakeholder issue in the water industry, by all ten water and sewerage companies (WASCs) in England and Wales over the seven year period 2005-06 to 2011-12. Our longitudinal data is also compared across companies and contrasted with the expert counter-account provided by the industry regulator, OFWAT. We find that the level, nature and presentation of a WASC's leakage disclosures change markedly reflective of their performance against OFWAT's target. Our evidence shows that the changes in reporting practice include the use of tactics and presentational methods consistent with impression management, raising concerns regarding the balance and trustworthiness of voluntary disclosures in the annual report. We suggest that the IASB should further consider their guidance on narrative disclosures, including presentational format, to reduce the scope for impression management within corporate reporting.

Key words: Reporting, impression management; performance; leakage; targets; disclosure.

This is an Author's Original Manuscript of an article published by Taylor and Francis Group in Accounting and business Research on 11/11/2015, available online: <http://dx.doi.org/10.1080/00014788.2015.1081554>

Introduction

Annual reports ‘are intended to be a legitimate and trustworthy medium through which management communicate information’ (Yuthas et al. 2002, p. 141), but they have also been criticised as being ‘a highly sophisticated product of the corporate design environment, the main purpose of which is to proactively construct a particular visibility and meaning’ by communicating ‘a picture of the organisation’ (Stanton and Stanton 2002, p.478 and see Hines 1988, Hopwood 1996, McKinstry 1996). Further, the ‘front-end narrative’ disclosures within annual reports have been identified as either a potentially important and valuable source of corporate information to investors and other users (Clatworthy and Jones 2003, Beattie et al. 2004a, Solomon and Solomon 2006, Kent and Zunker 2013) or, and of pertinence to this study, assumed to include ‘managerial discretionary disclosure choices [that] are opportunistic and constitute impression management’ (Merkl-Davis and Brennan 2007, p. 117).

Impression management has been argued to be the process by which management convey their specification of reality through narrative, quantitative and visual disclosures in the annual report both to manage the corporate image and to report the performance of management (see Hines 1988, Stanton and Stanton 2002, Samkin and Schneider 2010, Merkl-Davies et al. 2011). From this perspective annual reports are ‘instruments of impression management’ (Arndt and Bigelow 2000, p. 501) whereby disclosures are self-serving (Neu et al. 1998) in presenting the organisation and its management in its best light and shaping organisational audiences’ perceptions (Aerts 1994, Stanton and Stanton 2002, Aerts 2005, Brennan et al. 2009, Merkl-Davies and Brennan 2011). More bluntly, Dhanani and Connolly (2012, p. 1144) asserted that disclosures in annual reports can be viewed as a ‘misspecification of organisational reality’. This raises broader concerns regarding the trustworthiness of the annual report (ICAS 2013, ICAEW 2013) and questions the expectation that corporate narrative disclosures (or the management commentary) will be ‘neutral’ and ‘possess the fundamental qualitative characteristics of relevance and faithful representation’ (IASB 2010, p. 10).

This research aims to provide evidence, if any, of impression management within the narrative section of annual reports. It is motivated by two specific challenges within the accounting literature. First, it examines ‘whether the use of IM [impression management] varies depending on firm performance’ (Brennan et al. 2009, 824). Previous studies have

considered how narrative disclosures in annual reports differ between successful and unsuccessful firms as measured by earnings (see Yuthas et al. 2002, Clatworthy and Jones 2003) and how the use of graphs and photographs throughout sustainability reports differ between sustainability leading companies and those that are less sustainability driven (see Hrasky 2012). These studies, however, have adopted a cross-sectional approach such that the reporting practices of successful firms are compared to those of unsuccessful firms over a single time period. Such cross sectional studies can provide insight between firms' reporting practices in a given year.

In contrast, Beattie et al. (2008) note that longitudinal studies provide an opportunity to study innovation and change in reporting practice. Evidence has been found that reporting practice may change in response to increasing stakeholder awareness (Samkin and Schneider 2010) and pressure (Neu et al. 1998) and to a change in CEO (Godfrey et al. 2003). Of more specific relevance to our study is the opportunity to examine how changes in reporting practice may, or may not, depend on an organisation's own performance. To our knowledge Beattie and Jones (2000a), Aerts (2001) and Courtis (2004) are the only impression management studies that specifically consider how a company's reporting practice is related to its performance. We agree with Beattie and Jones (2000a) that analysis of such longitudinal data provides a 'more efficient' (p. 217) approach and that it 'provides a more powerful test of the manipulation hypothesis than do previous cross-sectional studies' (p.224). The additional efficiency and power is provided by such longitudinal data naturally controlling for contextual and organisation-specific variables (see Campbell and Rahman 2010) and making management's discretionary changes to reporting more visible. Moreover, any such changes are set within the context whereby reporting practice can be considered as 'unadaptive' due to 'inertial forces' (Aerts 2001, p. 5). These prior studies, however, are limited in scope to a consideration of financial graphs (Beattie and Jones 2000a), attributional statements (Aerts 2001) and the use of colour (Courtis 2004).

The second challenge to which this paper responds is for future research to take a more 'holistic' research approach to enable 'a fuller picture of reporting practices' to be obtained (Brennan et al. 2009, p. 818) 'in pursuit of evidence of impression management' (ibid. p. 823). This paper, therefore, brings together a wide range of impression management tactics and presentational methods into a single framework. Whereas prior studies have tended to

focus upon a smaller number of impression management tactics or presentational methods, our study utilises this broader framework enabling us to consider impression management as a complex and multi-faceted practice (Ogden and Clarke 2005, Brennan et al. 2009). In doing so, we consider both narrative and visual (for instance graphics, tables and photographs) disclosure and hence address Dhanani and Connolly (2012, p. 1161) who commented: ‘future research may also examine the expressive powers of the visual which appeared to play a critical role to complement the narrative information’ (and see Campbell et al. 2009, Davison 2011).

We do this through a longitudinal analysis of disclosures made within the narrative sections of the annual reports of each of the ten Water and Sewerage Companies (WASCs) operating in England and Wales for the period from 2005-06 to 2011-12. We focus upon how the WASCs report upon their water leakage performance, a key regulatory metric. Our analysis of the WASC’s leakage disclosures is augmented by comparing it directly with OFWAT’s independent commentary on the WASC’s leakage performance. Most prior studies examining disclosures have solely focussed on the annual report and have not sought to contrast this company based view, or impression emergent from this, against a comparative account. A small number of other studies (see for example: Adams 2004, Boiral 2013) have used media coverage and news events, as sources of ‘counter accounting’. Each of these studies used ‘negative’ media coverage of social and/or environmental issues as a means of assessing the completeness and transparency of the related reporting. We believe that the OFWAT’s commentaries are of particular value, as they provide an informed and expert counter account of the WASCs’ leakage performance irrespective of whether it is good or bad.

Perhaps surprisingly, even in the UK in recent years water scarcity¹ has resulted in disruptions to supply and restrictions on water usage. The levels of water leakage have been implicated in these problems² such that the industry regulator (OFWAT) identifies leakage as a ‘serious’ and ‘important’ issue for the industry (OFWAT, 2011). In recognition of this

¹ More broadly, the importance of water scarcity, to which water leakage contributes, has been recognised by the UN as a global problem (see <http://www.un.org/waterforlifedecade/scarcity.shtml> last accessed on 7 August 2014).

² For instance, it was reported that ‘after two years of low rainfall, drought has been declared across southern and central England, with no end in sight for the hosepipe ban imposed in many places’ (guardian.co.uk 7 May 2012). The same report states that ‘every day 3.4 billion litres of water leaks from the system, almost a quarter of the entire supply’.

OFWAT sets annual leakage targets³ for each WASC (Hopkinson et al. 2000) as part of their price determination review. If a WASC misses its leakage targets, and exceptional circumstances not accepted, OFWAT has a number of regulatory actions at its disposal. These include requiring the WASCs to provide detailed quarterly reports, to use enforcement orders and, from April 2005, to fine companies for consistently failing to meet their leakage target. The seriousness of water reporting to the regulator is highlighted by the £35.8 million fine issued by OFWAT in 2007-08 to Severn Trent for misreporting prior leakage data submitted to OFWAT between 2002 and 2005. Even more significantly in financial terms is that, in our period of study, the companies' leakage performance is one of the factors that OFWAT considers when determining the price that the WASCs can charge their customers. In 2009 OFWAT's 'Overall Performance Assessment related price adjustments' were such that each company's price cap was subject to a one-off adjustment ranging from +0.5% to -1.0% (Ofwat 2009b).

Furthermore, leakage has been identified as a priority issue by consumers (Consumer Council 2007, 2013) and as having the potential to cause 'significant environmental damage' to rivers and wetlands (Select Committee on Public Accounts 2001). Thus leakage is an important and emotive issue, which impacts upon customers and the natural environment, but also has regulatory, efficiency and financial implications for the WASCs. Moreover the WASCs recognise the ability to meet their leakage target as an important reputational issue:

'The failure to meet the 2005/06 leakage target, while needing to impose a hosepipe ban as a result of the drought, led to much critical comment from the media and other stakeholders. The Company's reputation has suffered as a result, and **research indicates that most of this is related to perceptions of performance on leakage**. A sustained improvement in the Company's reputation must start with achieving significant long-term reductions in leakage' (Thames Water annual report 2007, p. 9, emphasis added by authors)

We argue, therefore, that water leakage and in particular performance against OFWAT's target are salient issues for the WASCs and their stakeholders. Moreover, and consistent with prior studies (Ogden and Clarke 2005, Crowther et al. 2006, Samkin and Schneider 2010), we expect that information relating to such salient issues will be disclosed in annual reports, as companies seek to inform shareholders and wider publics of their financial and non-financial performance. This context provides us with an opportunity to examine whether firms change

³ In setting leakage targets OFWAT do not consider it economic to eliminate leakage altogether, as the cost of this would outweigh the benefits.

their reporting practice, consistent with impression management, when their related performance changes.

This paper proceeds as follows. In the next section we review the impression management literature relevant to reporting practice. It also draws upon wider literature, such as social and environmental accounting, that has contributed empirical evidence of similar phenomena albeit from different theoretical perspectives. From this review, we present a consolidated impression management framework. We then set out the research method adopted followed by the presentation of the findings. Finally we offer discussion and conclusions, the implications of our study and areas for further research.

Impression management and reporting practice

Numerous impression management tactics and presentational methods have been identified in the accounting and wider literature. Tedeschi and Melburg (1984) provide an initial, although not comprehensive, classification scheme categorising impression management into assertive and defensive tactics. Assertive tactics proactively seek to establish a particular identity or traits which are valued by an audience. In contrast, the use of defensive tactics is often a reaction to a ‘predicament’, whereby undesirable traits have been attributed to the actor(s). Drawing upon elements of Tedeschi and Melburg’s (1984) framework examples of both assertive (ingratiation⁴, self-promotion, exemplification, entitlement and enhancement) and defensive (dissociation, excuse, justification, apology and restitution) impression management tactics have been evidenced within the annual reports of public sector organisations such as hospitals (Arndt and Bigelow 2000) and private and listed companies (Aerts 2001, 2005) including regulated utilities (Ogden and Clarke 2005).

Evidence of an additional defensive tactic, concealment (Abrahamson and Park 1994, Arndt and Bigelow 2000, Dhanani and Connolly 2012) has also been found in the accounting and management literature. Merkl-Davies et al. (2011, p. 318) suggest an example of concealment is ‘displaying positive organisational outcomes more prominently than negative organisational outcomes (e.g. by means of positioning or highlighting)’. Similarly, Dhanani and Connolly (2012, p. 1144) suggest that concealment is ‘when management chooses to

⁴ Tedeschi and Melburg (1984) identify four specific ingratiation tactics, which are ‘self-enhancing communications, other enhancing communications, opinion conformity, and favour-doing’ (ibid, p. 38).

downplay or withhold negative, material information while disclosing less relevant, positive information.’ The reference here to withholding negative, material information is also apparent in their contention that concealment ‘refers to situations where management chooses to omit bad news items’ (ibid. p.1144). Concerns over the absence of accounting (see Choudhury 1998, Catasús 2008), absence of reporting (see in particular Adams 2004, Belal and Cooper 2011, Boiral 2013), and ‘thematic manipulation’ (Brennan et al. 2009) of disclosures to good news (see for instance Neu et al. 1998, Kent and Zunker 2013) has already been identified in the wider, particularly social and environmental, accounting literature, but, to date, it has been conflated with concealment in the impression management literature. In this research we more clearly distinguish between omission and concealment as two separately identifiable defensive tactics.

On the whole, the studies considered thus far have provided examples of how disclosures within corporate reports use assertive tactics, particularly self-promotion, enhancement, entitlement and exemplification to attribute an organisation’s success to internal factors and make use of defensive tactics, particularly dissociation, concealment, excuses and justifications, in response to negative events (Arndt and Bigelow 2000, Aerts 2001, 2005, Ogden and Clarke 2005, Dhanani and Connolly 2012). A further tactic not considered in the above studies is where management can be ‘selective’ in choosing which performance numbers to report and what ‘performance comparisons’ to make (Brennan et al. 2009). There is cross-sectional evidence to suggest that both the selection of performance numbers and choice of ‘benchmarks’ is biased to accentuate improved performance in earnings announcements (Schrund and Walther 2000), press releases (Guillamon-Saorin et al. 2012) and in the Chairman’s statements of annual reports (Clatworthy and Jones 2006). Table 1 provides definitions of the impression management tactics as drawn from the extant literature and used within this research.

Insert Table 1 about here

Further presentational approaches to impression management of narrative disclosures have been studied in the accounting literature. Brennan et al. (2009) identify syntactical manipulation, rhetorical manipulation, and visual effects (emphasis) as impression management methods. There is considerable evidence of syntactical and rhetorical

manipulation being used within annual reporting (see for example: Courtis 1998, Clatworthy and Jones 2001, Sydserff and Weetman 2002, Courtis 2004), which relates to language and linguistic choices made by those individuals undertaking impression management. Managers may obfuscate by using rhetorical language that is ‘persuasive/convincing/credible’ (ibid, p. 795) and through syntactic manipulation whereby more complex words and sentences are used in the reporting of negative performance. In this way negative messages are less easily understood by the audience. More generally, obfuscation, which is often measured through textual and syntactic complexity, relates to the clarity of disclosures and can include non-linguistic devices (Rutherford 2003). One particular form of bias is the increased use of self-referencing (I or we) when reporting more positive messages (Li, 2010). Brennan et al. (2009) identify how impressions of narrative disclosures can be managed through visual techniques. Emphasis of positive messages within the text can be provided visually, for instance through the use of colour or larger font size. There is limited evidence of such visual effects, but Jameson (2000), whilst drawing upon narrative theory rather than impression management, found that they were present in a cross-sectional study of the shareholder reports of both top-return and mixed-return equity mutual funds. Emphasis can also be achieved through repeating positive messages and locating them in prominent positions. Bowen et al. (2005) have found that ‘metrics that are more value-relevant and portray more favourable firm performance’ are emphasised through their positioning within press releases (and see Guillamon-Saorin et al. 2012). Further, messages can be reinforced or diminished through using a keyword to accentuate (i.e. very) or understate (i.e. small) its significance.

To this point our discussion has focused upon the nature and content of narrative disclosures, which are themselves complex (Beattie et al. 2004b), and to a lesser extent quantitative information (‘selectivity’ and ‘performance comparisons’), but annual reports also commonly include tables, photographs and graphs. Such visual effects can ‘activate readers’ and ‘persuade them of the credibility of the reports’ (Stanton and Stanton 2002, p. 487). Despite this, and a call to examine the range of impression management devices used by management throughout the annual report as a whole (Davison 2002), it remains surprising that impression management research is largely narrative based. Studies investigating the use of photographs (Preston et al. 1996, Davison 2008, 2010) and graphs (Beattie and Jones 2000a, 2000b, 2002, Godfrey et al. 2003) have been, or could be, interpreted as further evidence of impression management. In particular the impression management of graphs within annual reports

through ‘selectivity’ and ‘measurement distortion’ is well established and has recently been found to also be evident in stand-alone sustainability reports (Jones 2011, Cho et al. 2012). There remain, however, very few studies that undertake a holistic review combining narrative and visual, despite the contemporary mixed presentation of annual reports (although Boiral 2013 does so for sustainability reports using a different theoretical perspective).

Our review of the literature suggests that there are two aspects (see Tedeschi and Melberg 1984, Godfrey et al. 2003, Brennan et al. 2009) tactic and presentational method, to impression management within organisations’ reporting practice. We bring together the relevant literature within an impression management framework shown in Figure 1. Omission is shown as a defensive tactic, but demarcated by a separating line, as unlike all other tactics, it is not associated with presentational method.

Insert Figure 1 about here

The framework recognises the range of assertive and defensive tactics and the numerous associated visual and narrative methods that may be used in communication. No prior study has considered such a wide array of impression management tactics and presentational methods, both narrative and visual. As a consequence less is known about how their use may be complementary and interrelated combining a number of tactics and presentational methods. This is important as it more fully conceptualises the complexities of corporate reporting practice, and any associated impression management (Merkl-Davies and Brennan 2011), in a more ‘holistic manner, and not by merely using a single measure’ (Brennan et al. 2009, p. 819).

Prior impression management research examining extent to which impression management is related to a firm’s performance is limited, but there have been a small number of studies that present cross-sectional analysis of how differences in performance may influence reporting practice. There is some evidence to suggest that narrative and visual disclosures are different when strong financial or sustainability performers are contrasted with weaker performers (Clatworthy and Jones 2003, Hrasky 2012). More generally, the vast majority of empirical papers relevant to impression management in annual reports and sustainability reports have adopted a quantitative approach to consider impression management using cross-sectional data as can be seen from Table 2.

Insert Table 2 about here

Our review of the extant literature, therefore, suggests that there is a relative paucity of impression management studies drawing on longitudinal data from annual reports. The advantage of such longitudinal analysis is that evidence can be sought to examine if changes in reporting practice can be related to particular circumstances or characteristics. For instance, Neu et al. (1998, p. 277) assume that ‘environmental disclosures will vary over time in response to these pressures [from specific and general publics]’. Similarly, Samkin and Schneider (2010) examine how narrative disclosures change in response to stakeholder awareness of different issues that impacted upon their case organisation.

Beattie and Jones (2000a), Beattie et al. (2008) and Godfrey et al. (2003) utilise longitudinal analyses to examine the impression management of financial graphs. Godfrey et al. (2003) specifically consider how a change in CEO may impact upon the selection of which financial graphs to report and their potential distortion. They find some evidence of ‘favourable impression management in the year after a CEO change’ (p. 95). Beattie et al. (2008) specifically found ‘continued evidence that financial graphs are used ... for impression management purposes’ (p. 217) and moreover that the nature of the impression management had changed over time. For instance they found evidence that the ‘incidence of material distortion in key financial graphs has risen markedly’ from 1989 to 2004 (ibid.).

Of most relevance to this paper are the three studies that examine how reporting practice may be related to changes in an individual firm's performance. Beattie and Jones (2000a) find ‘strong evidence that the selective use of graphs ... is related to corporate performance’ (p. 224) and that ‘the direction of change in the performance indicator is of greater influence on the graph use decision than is the magnitude of change’ (p. 225). Courtis (2004) found evidence of reporting practice, specifically the use of colour within annual reports, changing but in this case the evidence was not ‘clear-cut’ as both companies with increasing profitability and companies with decreasing profitability were likely to have an increased application of colour in their annual reports. Finally, Aerts (2001) considered to what extent the ‘attributional content of the accounting narratives’ varied with firm characteristics, including changes in profitability. He observed ‘non-responsiveness ... to overall

performance change’ (p. 29) and as such he found that there are ‘inertial forces’ that drive consistency in reporting practice.

The majority of this research does appear to provide evidence that reporting practices are influenced by firm characteristics and circumstances, but the evidence with regard to the influence of firm performance and changes therein is scarce and mixed. Whilst Beattie and Jones (2000a) and Curtis (2004) do find evidence of some change in reporting practice when performance changed, Aerts (2001) found the disclosure of attributional statements to be relatively non-responsive. This paper aims to contribute to this literature by providing new evidence as to whether corporate reporting practice, consistent with impression management, changes depending upon company performance.

Method

The research method adopted in this study was designed to enable a longitudinal and comparative analysis of company reporting mapped against relative performance, in our case their regulatory leakage target. The longitudinal design enables the research to provide evidence of differential reporting, consistent with impression management, by companies between successive years of target attainment compared to target failure and with those companies that continually met their performance level across the period. The period of study was chosen to commence with a new regulatory pricing cycle from 2005-06 and was extended for a seven year period to 2011-12. Unlike many prior cross sectional studies, by adopting a longitudinal approach, the research ‘allows discretionary *changes...* by companies to be identified and related to changes in individual companies’ corporate performance’ (Beattie and Jones 2000a, p. 213, emphasis in original).

To ensure a high level of coverage across the water sector, all WASCs were used in the study. Within England and Wales, WASC’s account for approximately 85% of the total water leakage targets (84.2% as at 2011-12 and 86.1% as at 2005-06), with much smaller water only companies making up the remaining 15%⁵. The annual reports for all WASCs and the Security of Supply reports, produced by OFWAT, were obtained for all years 2005-06 to 2011-12. Leakage levels were initially obtained from the OFWAT Security of Supply reports, an independent reporting document, rather than the annual report. The necessity of this

⁵ The average annual leakage target for a WASC is approximately 300MI/d whereas for water only companies the average target is 44MI/d.

approach was particularly evident in the event of failure to achieve the target level as in some instances neither the actual level nor the target were disclosed by the reporting WASC in their annual report for that year. For each WASC, for each of the seven years, the actual and target level of leakage was recorded and used to identify those years in which any WASC had failed to achieve its target level. WASC leakage performance against regulatory target in the seven year period, 2005-06 to 2011-12, is summarised in Table 3. From this, 13 instances of target failure are identified straddling two periods; firstly, 2006 and 2007; and, secondly 2010 and 2011 with all WASCs achieving target leakage in the intervening years 2008 and 2009 and again in 2012.

Insert Table 3 about here

For all instances of failure against target, company leakage reporting was compared against their disclosure in the tangential years of target attainment within the timeframe of the sample period and against OFWAT reporting of their leakage performance in the year of failure. Consistent with the aim of the paper, this approach allows us to identify possible impression management through differential patterns in disclosure relative to performance. Many past studies examining disclosure from an impression management perspective have solely focussed on the annual report (Neu et al. 1998, Clatworthy and Jones 2003, 2006, Courtis 2004, Ogden and Clarke 2005, Davison 2008, Dhanani and Connolly 2012), or another single reporting document, for instance sustainability reports (Hrasky 2012) and press releases (Brennan et al. 2009) and have not sought to contrast this against a comparative account. There are a small number of studies (for instance Adams 2004, Boiral 2013) that have compared disclosure in annual reports or sustainability reports with external sources of data such as media reporting. However, in general such prior studies have been on a single year basis (see for instance Adams 2004, Mäkelä and Laine 2011, Chalmers et al. 2012, Boiral 2013). Based on this comparative aspect of the research design, areas of potential reporting concealment or omission as two distinct impression management tactics can be more readily identified. Omission does not mean that there is no leakage reporting, but rather it is where an item of material, negative information is not present, such as no disclosure of leakage levels in comparison to disclosure in tangential years, whereas concealment is where such disclosure is present but in some way hidden through presentational methods such as page positioning, small print or obfuscation.

Water leakage forms part of voluntary disclosure made by WASCs in their annual reports, there is no statutory disclosure requirement. For voluntary disclosure, annual reports are widely used in accounting research for two reasons of pertinence to this study. Firstly, companies have editorial control over annual reports, and voluntary disclosure in particular, and as such these documents convey the reporting intent of management (Guthrie and Parker 1989, Campbell 2000, Abeysekera 2008, Mäkelä and Laine 2011). Importantly for this research, Kent and Zunker, (2013) assert that the annual report represents ‘the voluntary information that management has selected to disclose’ (p. 1081). Secondly, from a longitudinal perspective, annual reports provide a consistent and robust source of data with regard to a company’s performance (Campbell 2000, Neimark 1995). This enables longitudinal analysis to provide insights into how reporting practice may change relative to performance. This would not be possible with other reporting mediums, for instance prospectuses (Bukh et al. 2005) which are one off documents or the use of websites (Striukova et al. 2008, Lee et al. 2007) that lack historic availability.

For all years, for each WASC, all narrative and visual disclosure related to leakage was extracted from the Security of Supply reports and the annual reports. Thus there were seven Security of Supply reports with a total of 281 pages and 70 annual reports (ten WASCs over seven years). Within the annual report, all of the voluntary disclosure sections were examined up to the Director’s report and corporate governance statement. This typically included the cover page, highlights, chairman’s statement, chief executive review and performance review including corporate social responsibility. In total 1,985 pages of annual report information were examined.

To identify the relevant leakage disclosure from the annual reports and the Security of Supply reports, a multi stage qualitative content analysis process (see Ogden and Clarke 2005, Boiral 2013, Dhanani and Connolly 2015) was undertaken. The leakage disclosures identified include both text and visual effects and we agree that such ‘qualitative disclosures are best handled by qualitative methodologies’ (Rutherford 2003, pp. 206-7). Such qualitative studies are still relatively rare (see table 2), but this approach appears to be particularly valuable when visual images are to be examined (see for instance, Preston et al. 1996, Davison 2008, 2010, 2011, Samkin and Schneider 2010, Boiral 2013).

Firstly, to identify leakage related disclosure of each annual report and to triangulate the data, the researchers developed a set of key words that would be used to search for relevant leakage disclosure: leak(age); burst; spillage; lost; target and OFWAT. One WASC was used as a pilot and both of the researchers independently extracted and recorded, in a word document, leakage related narrative and visual disclosure (such as colour, use of bold or font size used in text or related graphics) for the seven year period. Other relevant visual images, such as photographs and tables, were identified as being those that related directly to leakage narrative reporting and had leakage data within them or included leakage in a caption (see Hrasky 2012, Boiral 2013), for instance a photograph of a leak inspector. The researchers then met to review the pilot data. In all instances there was agreement between the researchers on the recorded leakage disclosure. Based upon this pilot, all remaining reports were then examined and all narrative and visual leakage related disclosure extracted. This was replicated for the Security of Supply reports.

Based on the qualitative content analysis dataset, the next stage was to tease out from the annual report based extracts, those passages and images most relevant to illustrate differential reporting, consistent with impression management, between years of target attainment and failure. This enabled the research to identify the relevant changes in reporting contrasting between years of target failure to target attainment. Other relevant instances of consistent reporting relevant to performance were also captured, as well as the disclosures provided by those WASCs that had continually attained their target. This was achieved through multiple close readings by each author whereby all of the material was read holistically rather than sectioned as it may appear in an annual report. Close reading is a 'forensic examination (of text) from a variety of perspectives' (Amernic et al. 2010, p. vi) that permits researchers to scrutinise text for, *inter alia*, themes, patterns, and silences (and see Brennan et al. 2009, Craig and Amernic 2011). The final stage was to apply our framework by coding the relevant narrative and visual images identified to highlight differential reporting relative to performance. Using figure 1 and the related definitions (see table 1), each disclosure was categorised by the relevant assertive or defensive impression management tactic(s) and by its presentational format(s). This was performed by each researcher who then met to finalise the coding and resolve any differences. Due to the scale of examining the narrative and visual disclosures, photographs were noted where they are present/absent from the leakage reporting

but the photographs themselves are not analysed (see for instance Davison, 2008, 2010) through an impression management lens.

Two issues arose during the coding process. Firstly, whilst some tactics were clearly identifiable by the definitions provided (such as omission, selectivity and performance comparison), others were more nuanced, such as those pertinent to self-promotion, entitlement and enhancement. A number of working examples were used to help differentiate between such tactics. Self-promotion emphasises management competence, for instance, ‘playing a leading role in a review of leakage methodologies’ (Northumbrian 2009, p. 29); ‘making Anglian Water an industry leader for 2011/12’ (Anglian 2012, p. 41). Entitlement, we see, as more specific in relation to discrete reporting outcomes, for instance, ‘We achieved our leakage target for the tenth year running (Yorkshire 2008, p.1); We have met our leakage targets (Severn Trent 2012, p. 5). Finally, enhancement can be seen to emphasise achievement despite negative external factors, for instance, ‘We met leakage target despite severe weather’ (Anglian 2010, p. 4); ‘successfully met annual leakage target in spite of coldest December in England in the last 100 years’ (Pennon 2011, p. 8). Consistent with the overall research design to help resolve any coding ambiguity and to provide internal reliability, disclosures were contrasted between successive years of target failure and attainment. We thus are able to present evidence, drawing on specific examples relevant to impression management, that are demonstrative of how WASCs change their reporting practice between those years of target failure and years of attainment. For instance in the case of omission, the presence or absence of leakage disclosure on target or actual performance between years of target attainment and failure. Some, but not all, disclosures may be omitted in years of failure compared to that disclosure provided in other years, whilst other disclosures that are provided may be consistent with other tactics of impression management such as concealment or selectivity. A similar comparative analysis applies to all other coding. Thus for entitlement and enhancement, we observe in years of target attainment, companies disclose their success with no reference to any favourable external factors (such as mild weather) or enhance their achievement of performance despite negative externalities. In direct contrast in tangential years of failure against target we observed the use of defensive tactics such as omission or excuse (such as the target failure being directly attributed to externalities such as poor weather). In light of this, we would argue that such a change in reporting to clear disclosure of target attainment for that year is consistent with entitlement as set out in table 1 ‘an organisation’s management claims responsibility for positive events and outcomes’.

Enhancement is identified in those instances where disclosures emphasise target attainment ‘despite negative external influences’.

Secondly, within the leakage reporting, a number of impression management tactics and presentational methods may be used together (i.e. they are not mutually exclusive) within the identified disclosures consistent with Figure 1. For instance we may observe tactics evidencing selectivity, performance comparison and self-promotion along with presentational methods of page positioning, repetition, font size and colour. All relevant tactics and presentational methods identified are noted in Tables 4 to 10. Thus, the findings that follow are multi-faceted with a range of defensive and assertive tactics used in years of target failure and attainment respectively mirroring company disclosure over the time period. The differential reporting observed in, and between, those periods is additionally contrasted with those WASCs that consistently met their targets in all years 2005-06 to 2011-12 shown in tables 6 and 10. Finally, we give specific consideration to that reporting, both narrative and visual, whilst relevant to leakage, does not change with regard to target achievement and hence is not consistent with impression management from a longitudinal perspective with regard to changes in performance.

Our approach can best be described as a ‘close critical reading’ (Laine 2005) of the texts and we do not claim to have undertaken critical discourse analysis (Ferguson 2007). We accept that a limitation of our approach is that our conclusions are based on an analysis of the corporate and regulatory documents and that we do not provide evidence on how these documents are interpreted by their users and so ‘we concede the risk of the “fallacy of internalism” (Ferguson 2007)’ (Mäkelä and Laine 2011, p. 220). Our research design, both longitudinal and contrasting WASC and OFWAT disclosures, informs our interpretations, but we acknowledge that, due at least in part to space restrictions, we do not provide a fully comprehensive account of all leakage disclosures and, as is the case with much qualitative research, we accept that alternative interpretations could be reached.

Findings

By examining how reporting changes relative to performance between instances of target failure and target attainment a number of differential reporting practices are observed. This helps to provide evidence of impression management associated with changing performance

relative to a key performance metric at an individual company level and between companies operating in a common industry. Within the longitudinal period, the relevant OFWAT and WASC leakage reporting for all years of failure and adjoining years of target achievement are shown in Tables 4 and 5 (relevant to failures in 2006 and 2007) and Tables 7 to 9 (relevant to failures 2010 and 2011). To provide coherence, the findings have been purposively sectioned by a number of identified key impression management tactics most relevant to the disclosures in the year of target failure. Whilst this approach provides a structure for the longitudinal analysis, we clearly recognise within each section the inherent overlaps relevant to other impression management tactics in that year, and in those cases of a second year of failure, that are referred to as appropriate.

Omission of target failure

In years of target failure, we observe examples of omission by WASCs relevant to their performance and/or their failure against target. This is contrasted with their disclosure in years in which they achieved the target, where we observe a marked shift in disclosure, and related presentation, to highlight their performance and target attainment. As discussed earlier, omission relates to elements of disclosure rather than a complete absence and hence will often be combined with other impression management tactics such as selectivity that are referred to and more fully addressed in the relevant section of the findings.

In 2006, Thames and United Utilities failed against their regulatory leakage target. There was no disclosure provided by either of the companies of their failure against their respective targets, nor any data on OFWAT target levels (annual average MI/d) and their performance against these (see table 4). Whilst not disclosing target failure, United Utilities prominently states that ‘it is pleased with progress on important areas such as leakage’ (p. 2) indicative of self-promotion and further, using a historical perspective that it has ‘halved water leakage since 1995’ (selectivity and performance comparison, see later). The lack of disclosure on leakage performance against target is perhaps surprising mindful of the strength of the disclosure provided by OFWAT in their reporting of the target failures as shown in table 4. In contrast, in 2007 when the target was met, both companies disclosed their prior year failure: ‘The failure to meet the 2005/06 leakage target’ (Thames 2007, p. 9); and ‘met the economic level of leakage rolling target...for the first time in five years’ (United Utilities 2007, p. 28). The disclosure in 2007 makes clear their achievement of the target consistent with

performance comparison, entitlement and self-referencing: Thames ‘we met the required target for 2006-07 by a considerable margin’ (p. 10); and, United Utilities ‘we out-performed the rolling average leakage target’ (p. 35). Within these disclosures we see evidence of reinforcement (‘considerable margin’; ‘out-performed’) and each company further emphasises its achievements by repeating the disclosure of target achievement three and four times respectively. In terms of presentational format, Thames displayed a table of performance against target in 2007; no performance data was given in 2006. United Utilities highlighted their target attainment with a blue water bubble graphic as part of the chief executive’s report: ‘we have achieved our economic level of leakage rolling target’ (p. 6). Further to this immediate change in reporting in 2007, in all of the years that follow from 2007 to 2012 both companies clearly report their target achievement. Thames consistently and prominently discloses their leakage target achievement. For instance, ‘the Company has achieved its leakage target for the sixth successive year, and by a significant margin’ (Thames 2012, Chairman’s Statement, p. 4). A similar pattern of subsequent annual disclosure, absent in the year of failure, is also provided by United Utilities, with prominence of current year and historic target achievement: ‘met our regulatory leakage target for the sixth consecutive year’ (United Utilities 2012, Financial Highlights, p. 1).

Severn Trent failed to achieve target in both 2006 and 2007 (see table 5). The leakage related disclosure found on page 17, in 2006 implies that leakage target has not been met, ‘by the end of the AMP4 period, we can reduce our leakage figures to below the target level set by Ofwat’ (Performance Review, p. 17). However, unlike later years of target attainment, there is no explicit disclosure with regard to the current year target failure or any data on leakage target levels, consistent with omission. Further, the page location of the narrative only disclosure that is provided is consistent with concealment (see later). In contrast, in 2008 when the target was attained full and prominent disclosure is provided on the inside front cover of the annual report. The 2008 performance is visually emphasised to readers in blue bold graphics: ‘Delivering results: outperformed against leakage target’ (entitlement, performance comparison; reinforcement). A further graphic on KPI highlights reinforces the outperformance against target (p. 10). The performance against target was repeated a further twice. In the subsequent year of target attainment, 2009 (‘outperforming our leakage target’, p. 1), there is equally prominent disclosure of success again visually emphasised through large font and bullet. In 2007, the second year of target failure, there is disclosure of target

failure (p. 7) although continued omission of the ongoing regulatory action by OFWAT and omission of the target level matched to performance unlike that disclosed in subsequent years. However, the disclosure is more prominently positioned within the chief executive's report (p. 7) emphasising the year on year improvement in leakage (performance comparison). This increased prominence and level of disclosure in the second year of failure may indicate a further change in reporting practice. Impression management tactics, such as concealment or omission, may be employed to mask, or remain silent on, short term issues (Merkel-Davis and Brennan 2007), but companies may disclose more in a subsequent year of failure as its leakage performance arguably becomes more apparent as an issue to the regulator and stakeholders. Moreover, the company may, in the second year, be able to report, positively, a reduction in year on year leakage, compared to the first year of failure as detailed above. The increased disclosure in the second year of failure, especially in cases where failure against target is now also disclosed serves to provide a more balanced account and parallels that observed in the earnings management literature (see for instance Kuang et al. 2014, Marinovic 2014 Scott 2012) where over the longer term, short term bias in reporting is not sustainable.

Whilst omission was a common feature in the first period of target failures, there is less evidence regarding omission in the later period, although, as seen in the following sections below, there is common use of other defensive tactics. In respect of Yorkshire for 2010, there is omission of target and performance and their failure to meet the target for that year (see table 8). Instead the disclosure states that 'our aim is to...outperform our targets' and to be 'OFWAT's frontier company' (p. 6) (self-promotion). No leakage data or consideration of target failure is disclosed. Prior to the failure, in 2008, Yorkshire prominently reported 'We achieved our leakage target for the tenth year running' (p. 1) (performance comparison, entitlement and self-referencing) repeated a further twice and reinforced against the target level of leakage. In 2009, leakage is reported in the Business Review showing the actual and target data: 'turning out at 295MI/d and we out-performed our regulatory target of 297.1MI/d' (p. 5) again providing readers of the annual report with clear and unambiguous information on their attainment of target. Following their return to target attainment in 2012, the disclosure reverts to their explicit and prominent disclosure of leakage performance and their target attainment, which is repeated and reinforced in the disclosure provided. For instance, 'comfortably over achieve the leakage target of 297 MI/d and achieve the lowest ever levels' (p. 4) reinforced through the use of a table, notably not used in prior years of failure, showing

actual, prior year and target levels for leakage. In common with the multiple failure of Severn Trent, in the second year of failure (2011), increased disclosure relevant to target, is provided by Yorkshire (see table 8). This will be further discussed in the context of concealment and excuse and justification, nonetheless it is again indicative of a pattern of an increased level reporting with respect to performance in the second year of target failure.

Concealment of target failure

Due to the research approach adopted, we are able to specify concealment as a distinct defensive impression management tactic compared to omission. We find evidence of concealment in failed years compared to the disclosure in tangential years of target attainment. Whilst omission was a common feature in the first period of target failure, concealment appears to be more common, as a differential reporting practice consistent with impression management, in respect of the later period.

For Anglian, in 2010 (see table 9), there is prominent and unambiguous disclosure of target attainment, ‘for the ninth year in succession, we have once again met our demanding targets on reducing leakage’ (Managing Director’s Statement, p. 6). In direct contrast, in 2011, the disclosure of performance against target shifts to page 29, indicative of concealment, although readers are prominently told that, ‘our leakage rates are consistently almost half the industry average’ (p. 4) (performance comparison; self-promotion). This comparison is also emphasised by a colour graphic showing the industry average (in the year of failure), not shown as a colour graphic in the preceding year of target attainment. The disclosure in 2011, against the industry average, is later repeated along with the statement claiming ‘we have met our leakage targets for the last eight years’ (p. 29) (entitlement). Such a claim is perhaps surprising given the failure to meet the target in the current year and the disclosure in the prior year (2010) that targets had been achieved for the ninth successive year as quoted above. For 2012, target attainment is again prominently conveyed to readers on the inside front cover visually reinforced through a graphic, the narrative of which is repeated on page 2 ‘beating our leakage target by over 6%’, (entitlement) and subsequently repeated a further four times. The industry positioning now conveys Anglian’s status as ‘an industry leader for 2011/12’ (self-promotion) compared to the graphic against average industry leakage rates used in 2011.

As noted earlier, there was omission by Yorkshire in 2010 of its failure to meet target with no disclosure of actual leakage levels or any leakage target figure. In contrast, in the second year of failure, 2011, greater disclosure on performance is provided showing actual leakage levels of 325 MI/d. However, the failure against target is concealed, as it is not clearly presented, (consistent with obfuscation), in the reporting within the section entitled: '100% compliance'. Within that section, they report a target figure as follows: 'with a view to reducing leakage to 297 MI/d' (p. 7). Hence, despite the claim of 100% compliance the target has not been met. Further, whilst that is the target for the year (extracted from Security of Supply data), this detail, is unknown to readers from the annual report but could be inferred due to the references to OFWAT in the '100% compliance' section. In contrast, in 2012, when the target is again met there is clear reporting of the target level 'achieve our leakage target of 297 MI/d' and the use of a table prominently displayed within the Business Review (p. 4) showing performance against target, not used in either year of target failure. The leakage performance is also prominently reported on page 1 in the Chairman's Review in 2012.

For Northumbrian, in all years 2006 to 2009, leakage target attainment is clearly disclosed using a single measure of leakage. In 2010, a year of target failure, the leakage reporting is concealed (consistent with obfuscation) through the use of two performance measures, annual and three year rolling targets, rather than the single measure used in all prior reports. Success against the three year rolling target is however attributable to the two prior years of target attainment (in 2008 and 2009) and thus less reflective of current year performance. In the second year of failure, 2011, we again observe increased narrative disclosure (see table 8) consistent with that seen in relation to Severn Trent and Yorkshire. The disclosure emphasises the weather as a causal factor (discussed further below), pays tribute to the efforts of employees in trying to control leakage, and notably their failure to achieve target, 'the severe freeze....as a result, we, along with other companies, did not meet our annual leakage target' (p. 39). Whilst Northumbrian disclose their failure to achieve target in each of the years 2010 and 2011, it is noteworthy that leakage data is shown in tabular form in 2012 (page 7), the next year of target attainment. In that year, success against target is clearly emphasised in the disclosure 'we met our target comfortably' (p. 18) with, and unlike the two prior years of failure, no reference to the weather as a causal factor nor reference to the performance of other companies in the industry

Finally, for Southern (see table 8), in all years prior to 2010, and subsequently in 2012, there is clear disclosure of target attainment, for instance ‘we recorded our lowest figure ever and beat the current target set by our regulator OFWAT by 11 Ml/d’ (2012, p.3). For 2010, the failure against target is obfuscated. The actual performance is reported in a table comparing current and prior year leakage levels and the target for next year. The target for the current year is reported separately in the narrative stating ‘its aim is to beat annual leakage targets set by Ofwat (92 Ml/d for 2009-10) maintaining its position as the water and sewerage company with the lowest leakage levels in the industry, measured on a per property basis’ (2010, p.4), emphasising its performance in the sector (selectivity and performance comparison), rather than its failure, in that year, to meet the target. In the following year, 2011, and common with other examples of consecutive failures against target, Southern provides disclosure of its target failure, ‘we have not met this target’ (2011, p. 6), although this was attributed to the weather (see excuse, justification and enhancement section later).

Selectivity of performance measurement

In addition to omission and concealment of target failure, there is evidence of selectivity and specific performance comparisons of data that changes between years of target failure and attainment. United Utilities failed to achieve target in 2006. It prominently reported a reduction in spot leakage (see table 4) and hence favourable comparison to prior year. The performance was emphasised by the use of a colour graphic. OFWAT leakage targets are based on annual average leakage levels. The selective use of data also enabled the company to report that: ‘met its spot target of 470 Ml per day at the end of 2005/06’ (p. 30) (entitlement) although, omitting its failure against the target measure of leakage used by OFWAT. In the following year, 2007, a year of target achievement, reporting of leakage was based on the standard performance metric of annual average leakage. The performance is again emphasised through a colour graphic and reporting is reinforced and directly compared to the target level ‘out-performed the rolling average target of 470 Ml per day for 2006/07 by achieving 468 Ml per day, meeting our agreed target with Ofwat’ (p. 35) repeated and emphasised by visual and narrative disclosure of leakage on pages 2, 5 and 6 of the report. Additionally in 2007, the KPI table reports leakage based on annual average compared to the prior year, which is restated in annual average data rather than the previously used spot data. Leakage was not included in the KPI table in 2006. In all subsequent years of target

attainment, leakage against target is prominently and consistently displayed in KPI tables using annual average data.

A similar pattern of selectivity with regard to leakage measurement is also observed for Severn Trent in respect of its increased disclosure in 2007, the second year of failure, (see table 5) after omission of target and actual performance in 2006. Two selective measures are used to portray performance in 2007, namely that ‘we attained a monthly level of leakage commensurate with the OFWAT annual target’ (p. 7) (entitlement) and a performance comparison of prior year performance ‘our leakage increased in the prior year’. Additionally, for 2007, a selective leakage measure, DMA (district metered areas), is shown within a KPI table. In 2008, a year of target attainment, the leakage data used in the KPI table is based on annual average leakage with the data for 2007 restated. In subsequent years (2009 and 2010) tabulated leakage information is similarly reported on an annual average basis and with comparisons against target provided in the narrative.

In 2011, Severn Trent failed against its target (see table 7). Compared to the prior failures, in 2006 and 2007, there is again increased disclosure and narrative regarding their failure to achieve target (p.7). The visual emphasis of leakage, consistent with selectivity and performance comparison, is against prior year data with a large colour graphic of comparative performance shown as part of the Business Review on page 12. This enables the company to focus on its maintenance of leakage levels compared to a prior period rather than, as in previous years of success against target levels. In contrast to the 2011 historic comparison, in the following year, 2012, colour graphics are used to report in detail directly against OFWAT target ‘have beaten our OFWAT target of 474 Ml/d by 10 Ml/d’ (p. 15), the success of which is repeated six times through the report.

Whilst Dŵr Cymru provided consistent narrative on leakage performance success and failure across 2010 to 2012 (see table 9), nonetheless there was evidence of differential reporting with regard to its visual presentation of performance, and against target, in the year of failure, 2011. In that year, a graph showing leakage was used for the first time that highlighted the fall in annual leakage for the ten year period from 2001/2 to 2010/11. This was scaled to show the ten year downward trend in leakage rather than highlight the rise in leakage in 2010/11 which was confined to the narrative. In the following year of target attainment, the

graph was rescaled, an example of measurement distortion (see Beattie et al. 2008), to show more clearly the fall in leakage in 2012 and the rise in leakage that occurred in 2011. There was a similar shift in presentational format of the performance comparison against target with respect to KPI reporting of water leakage. In 2011, the KPI table reported performance against prior year. For both the preceding year (2010) and subsequent year (2012) of target attainment, the KPI table includes target information, emphasised in 2012 by the use of a green tick to visually show target achievement.

Excuse, justification and enhancement relevant to performance

The weather as an external factor is commonly used by all WASCs to attribute failure against target, through excuse and justification, or conversely to enhance their target achievement. However, whilst this is a notable feature of their disclosure in bad weather conditions (freeze/thaw winter cycles) it is not present as an influencing factor in mild weather conditions.

In 2007-08 OFWAT reported: 'favourable weather conditions in 2007-08. The relatively mild conditions reduced significantly the number of bursts caused when the ground around water pipes freezes and thaws' (p. 23). Across all of the WASCs there is no attribution of performance to the mild weather. The disclosure by all WASCs reflects their good management of leakage in that year through self-referencing and consistent with entitlement. For instance, Severn Trent, 'we have outperformed our Ofwat target for 2007/08' (p. 6) and Yorkshire, 'we achieved our leakage target' (p. 1). In contrast all WASCs who failed their targets in 2010 and 2011, where disclosure is given, directly attribute their failure to the weather conditions (see tables 8 and 9). For instance, Yorkshire refer to 'the cold weather of 2010/11 turning out to be even worse than the previous year' and Northumbrian directly attribute their performance in both 2010 and 2011 to the 'severe freeze' and 'worst winter in over 100 years' respectively. Northumbrian's disclosure in both years also highlights that other WASCs had equally failed their target serving to diminish their own failure as a sector wide rather than company specific issue. In 2010, only two other WASCs failed against target. The direct attribution of target failure to the weather is further illustrated by Southern, 'as a result [of the harsh winter] we have been unable to achieve the challenging leakage targets that we set for ourselves' (2011, p. 4). Severn Trent similarly attributed their failure to the weather: 'Leakage was above target as a result of the severe winter weather' (2011, p. 5)

and for the first time in any disclosure used a visual to graph the winter peaks of leakage (p. 12). The weather was not mentioned as a contributory factor for target attainment in 2012.

However, it is not only those WASCs that failed their targets that make use of the weather as part of leakage disclosure. Bad weather is also used by those companies who met targets to enhance their levels of performance. For instance in 2010, Anglian reported, 'we met leakage target despite severe weather' (p. 4) and Dŵr Cymru similarly, 'we again achieved OFWAT's leakage reduction target despite...the freezing weather at the start of 2010' (p. 2). Again, there is no mention of the mild weather in other years of target attainment.

Cross-sectional evidence

We now turn to briefly contrast the differential disclosure observed in respect of target failures with that disclosure provided by those WASCs, Pennon and Wessex, that attained their target in all years across the period studied. In 2006 and 2007, three WASCs did not meet their OFWAT leakage targets in one or both of the years. We have presented evidence of omission, concealment and selectivity of their performance and reporting on their failure against the OFWAT targets in those years compared to their prominent and unambiguous reporting in subsequent years of target attainment. In contrast, the companies that met their leakage targets across the period, 2006 to 2008, provide consistent reporting of their leakage performance against the OFWAT target with little variation in the disclosure as shown in table 6. However, in the second period of multiple target failures, 2010 and 2011, there are some shifts in their disclosure to highlight their performance relative to other WASCs (see table 10). Notably in 2011, when six of the ten WASCs failed against target, and in contrast to all preceding years, there is a significant increase in visual effects used in reporting to emphasise the 'industry leading performance' (inside front cover and repeated p. 8) of Pennon in 'successfully meeting leakage target'. All visuals are colour; large font and prominently shown commencing on the inside cover and repeated in the Business Review. A similar prominence of industry positioning is also shown by Wessex in 2011 who report, 'We remain one of the most efficient and profitable of all water and sewerage companies, with the highest levels of service in the industry...we not only cut leakage but also met a challenging new target' (p. 4). This provides some initial, albeit anecdotal evidence, that companies change their reporting practice to highlight their superior performance relative to others.

Unchanged reporting practice

Finally, we find elements of disclosure that could be demonstrative of impression management when compared cross-sectionally, are not subject to differential reporting when specifically mapped against target success and failure⁶. For instance, disclosure pertinent to levels of investment in leakage and leakage repair rates provided by some WASCs, conveying a positive message to readers arguably consistent with impression management, is found in years of target failure. However similar disclosure is also provided in subsequent years of attainment. Thus the reporting practice does not alter with performance. The following extracts relevant to these issues provide illustrative disclosure in years of target failure:

We are spending on average more than £500,000 per day on this and are fixing an average of 200 leaks a day. We have more than 1,000 people working on our ambitious project to replace our oldest and leakiest mains in London. In the calendar year 2005 we accelerated this work and replaced over 150 km of the oldest water mains in London. (Thames 2006, pp. 3-4).

We employed more people, invested in new leak detection technology, fixed 37,000 leaks, 8,000 more than the previous year (Severn Trent, 2007 p. 6).

In the following year of target attainment, the disclosure regarding investment in leakage and repair rates as ongoing issues remains broadly constant, and unlike prior findings of differential reporting, do not significantly change with their performance against the key measurable.

Continuing with Victorian Mains Replacement ("VMR") to tackle legacy issues associated with security of supply and leakage...The Company's VMR programme will provide the majority of the reduction in leakage as old pipes are replaced by new in the leakiest parts of London...Over the five years to 2010 the Company intends to invest more than £500,000 a day to reduce leakage: a total of around £1.15 billion. (Thames 2007, p. 14).

In 2007/08, we found and fixed over 39,000 leaks, compared with 37,000 in 2006/07 (Severn Trent 2008, p. 16).

In relation to visual effects for the presentation and emphasis of disclosure, we have seen differential reporting practice with respect to tables and graphics. A further powerful source of visual emphasis, is the use of photographs. Whilst we restrict our findings to the presence of photographs, there are instances of photographs showing leakage related matters, particularly in relation to employees, such as leak inspection teams (Wessex 2011, p.20); leak employee profiles (Anglian 2012, p. 74; Severn Trent 2012, p15) and network upgrade

⁶ We are thankful to one of the reviewers for referring to the power of longitudinal research design. This helps to separate continuous reporting of an issue compared to differential reporting that is more consistent with impression management.

(United Utilities 2008, p. 20). However, we find that the use of photographs is not related to changes in performance in this instance⁷. Rather, photographs appear as more variable elements of reporting across all of the WASCs and throughout the longitudinal period.

Discussion and concluding comments

Our findings section reported our qualitative analysis of the ten WASCs annual report leakage disclosures over the seven year period 2005/6 – 2011/12 mapped against their performance and with OFWAT's own commentary. This section discusses the key themes that emerge from our analysis and concludes our paper by recognising its limitations as well as outlining areas for future research.

Firstly, we return to Brennan et al.'s (2009) 'central question' to provide evidence that reporting practices do vary with firm performance. In contrast to earlier studies (Yuthas et al. 2002, Clatworthy and Jones 2003, Hrasky 2012), which consider how disclosures vary across companies according to overall financial or sustainability performance, our longitudinal analysis provides insights into how reporting practice changes relative to performance. It considers leakage disclosures with regard to leakage performance, an important strategic and stakeholder issue for the WASCs. From the seventy firm years we analysed, there were thirteen instances where a WASC failed to meet their leakage targets (a measure of poor performance). We provide evidence that in such instances the level, nature and presentation of leakage disclosure was, in general, markedly different, and consistent with impression management, as compared with the years in which the same WASC did successfully meet their target (as a counter measure of good performance).

The second challenge to which our research responded was to adopt a more holistic approach to examining impression management. Prior studies have tended to take a more narrow focus on specific aspects. To help with this, we developed a framework drawn from the underlying literature that sets out impression management tactics and presentational method. We find that impression management tactics are not mutually exclusive, but rather multiple tactics are commonly found to be used in conjunction with each other. Similarly numerous presentational methods are often employed together and moreover our evidence suggests that there is a mosaic of impression management tactics and presentational method in relevant

⁷ We are thankful to one of the reviewers for highlighting the use of photographs in comparison to other visual effects used by WASCs in their leakage related disclosure.

leakage disclosures. We do, therefore, find that impression management is a multi-faceted and complex practice (Ogden and Clarke 2005, Brennan et al. 2009). Whilst we find that some impression management tactics are commonly used in the examined reporting, others such as apology and restitution do not feature. It is possible that particular issues may, due to their inherent nature, lend themselves more readily to the use of certain defensive tactics. Omission, concealment or excuse and justification may be often used defensive tactics for leakage reporting, but perhaps apology and restitution may be more appropriate for disclosures relating to pollution and sewerage incidents that more directly impact on the environment with wider public health issues.

Of those tactics that were more evident in the examined disclosures, we find that WASCs commonly omitted to report, or concealed their failure against the OFWAT target despite its importance to stakeholders (Hopkinson et al. 2000, Defra 2008, Consumer Council 2013). Concealment was through the location of the disclosures in less prominent sections of the report, or obfuscation in the reporting, with much less, or indeed no, use of visual effects. In these years, the vast majority of reporting was in the form of narrative disclosure. In contrast, these same WASCs did prominently, clearly and repeatedly disclose their success in meeting the target in years of success. Whilst the absence of accounting (Choudhury 1998, Catasús 2008) and absence of reporting (Belal and Cooper 2011, Boiral 2013) have been identified in the wider accounting literature it has tended to be conflated with concealment in previous studies that have drawn upon impression management (Ogden and Clarke 2005, Dhanani and Connolly 2012). Our evidence suggests that omission should be explicitly recognised as an identifiable impression management tactic which is distinct from concealment.

Other marked changes in reporting practice, indicative of impression management included evidence of selectivity, performance comparison and excuse/justification. For failed years, a WASC may select a different measure of leakage and change the benchmark to which this performance was compared and highlighted. Usually this was a comparison to prior year performance rather than the leakage target that was routinely emphasised in years of target attainment. In instances where the WASC did admit to failing to meet their leakage target the disclosures refer to the weather to as an external factor, which is outside management's control, and that contributed to the failed performance. Conversely, there was never any reference to 'mild' weather being a factor in years of target attainment.

Another notable feature of the disclosure is that in successful years WASCs would make much greater use visual effects complementary to the prominent and repeated narrative disclosure concerning target performance. There was a much higher incidence of graphics (often a water bubble or water drop) and detailed tables (showing actual and target data), as well as more visible presentational style through colour, font size, bold text and bullet points. The visual, in all its forms, is a particularly powerful medium for communication (Davison 2008, Campbell et al. 2009) and our findings provide further evidence that companies manage impressions through the ‘expressive power of the visual’ (Dhanani and Connolly 2012). The narrative tone in such years would be assertive, commonly showing evidence of entitlement, self-referencing, repetition, reinforcement, in emphasising target attainment.

There were also a small number of examples where a WASC failed against their leakage target for more than one year. Our evidence tentatively suggests that in a subsequent year of failure there is a further shift in disclosure. In general, we found less evidence of omission and concealment and greater clarity and prominence of reporting with respect to target failure in such instances. We note that it is well documented that the manipulation of earnings must reverse over time (Kuang et al. 2014, Marinovic 2014) and so is a short-term tactic that will be revealed over multiple accounting periods (Scott 2012). Effectively, over time managers will ‘run out of ways to manage earnings’ (Perols and Lougee 2011, p. 39) as they ‘cannot indefinitely postpone the day of reckoning’ (Scott 2012, p. 424). Similarly, the employment of impression management tactics has the potential to convey more favourable reporting to users who arguably ‘are unable to assess managerial bias in the short term’ (Merkl-Davis and Brennan 2007, p. 119). However such an impression may be more difficult to sustain in the longer run as the underlying poor performance becomes more apparent.

Due to the longitudinal research approach we are also able to identify those elements of disclosure, that remained either relatively constant when performance changed or had no discernible reporting pattern. For instance, disclosure relating to investment in leakage, whilst positive, did not vary with performance and hence is not consistent with impression management with regard to performance. Thus in considering research design, establishing the (in)consistency as well as tone of disclosure is an important consideration. Further, whilst leakage related photographs are included in annual reports, there does not seem to be evidence as to their use in support of conveying an impression to readers.

Whilst recognising that not all disclosure is subject to manipulation, nonetheless our evidence suggests that the ‘discretionary disclosure choices’ referred to by Merkl-Davis and Brennan (2007, p. 117) are exhibited with reporting practices changing relative to performance. This is contrary to the consistent use of attributional statements that Aerts (2001) suggested was due to ‘inertial forces’. Rather, our findings resonate with the more narrowly focussed studies of Beattie and Jones (2000a) and Courtis (2004), which found, respectively, that the use of graphs and colour changed with performance.

Whilst we accept that our study suffers from the ‘limitation of cross-sectional narrowness’ (Campbell and Rahman 2010, p. 57), importantly, we are able to illustrate the changes in reporting with performance and the complementary and inter-related nature of impression management. Such changes in reporting practice relative to performance are unlikely to be unique to this industry and concerns, with implications for corporate reporting practice more widely, have already been raised (ICAS 2013, ICAEW 2013). The omission or concealment of poor performance, and the evident selectivity of measurement bases and related visual emphasis used by the companies across the years of the study run counter to the notion of providing a trustworthy and balanced account of their performance to stakeholders (Crowther et al. 2006, IASB 2010, ICAEW 2013). The dangers of such a constructed reality referred to by Hines (1988) conveyed by managers in the annual report led Merkl-Davies et al. (2011, p. 317) to assert that impression management ‘constitutes an important governance and regulatory issue’.

From a practice perspective, ICAS (2013, p. 6) asserted that the voluntary disclosures forming part of the annual report should ‘not be subject to ‘spin’ or ‘bias’ – in particular to avoid the situation where the directors ‘cherry pick’ the information reported/provided and focus on promoting mainly the positive aspects of the company’s performance’. The IASB’s practice statement (2010, p. 15) suggests that management should consistently report performance measures within their management commentaries that ‘reflect the critical success factors of an entity’ and are ‘accepted and widely used ... within an industry’ to enable comparability across companies and over time. The practice statement specifically states that when ‘management changes the performance measures and indicators used, the changes should be identified and explained’ (p. 15). Despite such guidance, our evidence is that in times of poor performance, changes were made to the selection of performance

measures and their comparators and that this was not identified or explained. We therefore believe that the guidance on narrative reporting, and in particular performance metrics, should be reconsidered to reduce the discretionary reporting choices evident within annual reports. Further, the IASB's practice statement says very little about the use of visual effects, which our evidence suggests is an important part of disclosure and impression management. We also recommend, therefore, that the IASB should provide guidance as to the need for neutral and consistent use of visual effects, such as graphics, tables and graphs within corporate reporting practice.

Our qualitative analysis was undertaken in a particular empirical setting, which was particularly useful in enabling the WASCs' leakage disclosures to be contrasted with OFWAT's counter account. Our study does not provide any evidence as to whether narrative disclosures are the result of conscious or unconscious decisions making (Clatworthy and Jones 2006, Merkl-Davies and Brennan 2007) nor has it attempted to provide evidence on how these documents are interpreted by their users (Ferguson 2007). We recognise these as limitations of our study. Direct engagement with users, company management and the regulator in respect of the observed disclosures and impression management therein would also be a valuable extension for the research. Finally, we call for future impression management studies to analyse company specific longitudinal data so that further instances of, and reasons for, discretionary changes in reporting practice can be identified. Employing the framework developed in this research, may enable further comment on whether commonly used impression management tactics and presentational method change reflective of company or sector specific circumstances either within public utilities or in wider sectors of the economy.

References

- Abeysekera, I., 2008. Motivations behind human capital disclosure in annual reports. *Accounting Forum*, 32 (1), 16-29.
- Abrahamson, E. and Park, C., 1994. Concealment of negative organizational outcomes: an agency theory perspective. *Academy of Management Journal*, 37 (5), 1302-1334.
- Adams, C. A., 2004. The ethical, social and environmental reporting-performance portrayal gap. *Accounting, Auditing & Accountability Journal*, 17 (5), 731-757.
- Aerts, W., 1994. On the use of accounting logic as an explanatory category in narrative accounting disclosures. *Accounting, Organizations and Society*, 19 (4/5), 337-353.
- Aerts, W., 2001. Inertia in the attributional content of annual accounting narratives. *European Accounting Review*, 10 (1), 3-32.
- Aerts, W., 2005. Picking up the pieces: impression management in the retrospective attributional framing of accounting outcomes. *Accounting, Organizations and Society*, 30 (6), 493-517.
- Amernic, J., Craig, R. and Tourish, D., 2010. *Measuring and assessing tone at the top using annual report CEO letters*. Edinburgh: Institute of Chartered Accountants of Scotland.
- Arndt, M. and Bigelow, B., 2000. Presenting structural innovation in an institutional environment: Hospitals' use of impression management. *Administrative Science Quarterly*, 45 (3), 494-522.
- Beattie, V. and Jones, M. J., 2000(a). Changing graph use in corporate annual reports: A time series analysis. *Contemporary Accounting Research*, 17 (2), 213-226.
- Beattie, V. and Jones, M. J., 2000(b). Impression management: The case of inter-country financial graphs. *Journal of International Accounting, Auditing & Taxation*, 9 (2), 159-183.
- Beattie, V. and Jones, M. J., 2002. Measurement distortion of graphs in corporate reports: an experimental study. *Accounting, Auditing & Accountability Journal*, 15 (4), 546-564.
- Beattie, V., McInnes, B. and Fearnley, S., 2004(a). *Through the eyes of management: Narrative reporting across three sectors*. London: ICAEW, Certified Accountants Trustees Limited.
- Beattie, V., McInnes, B. and Fearnley, S., 2004(b). A methodology for analysing and evaluating narratives in annual reports: a comprehensive descriptive profile and metrics for disclosure quality attributes. *Accounting Forum*, 28 (3), 205-236.
- Beattie, V., Dhanani, A. and Jones, M. J., 2008. Investigating presentational change in U.K. annual reports. *Journal of Business Communication*, 45 (2), 181-222.
- Belal, A. R. and Cooper, S., 2011. The absence of corporate social responsibility reporting in Bangladesh. *Critical Perspectives on Accounting*, 22, 654-667.
- Benoit, W. L., 1995. *Accounts, Excuses and Apologies: A theory of image restoration strategies*. New York : State University of New York Press.
- Boiral, O., 2013. Sustainability reports as simulacra? A counter-account of A and A + GRI reports. *Accounting, Auditing & Accountability Journal*, 26 (7), 1036-1071.
- Bowen, R. M., Davis, A. K. and Matsumoto, D. A., 2005. Emphasis on pro forma versus GAAP earnings in quarterly press releases: Determinants, SEC intervention, and market reactions. *The Accounting Review*, 80 (4), 1011-1038.
- Brennan, N. M., Guillamon-Saorin, E. and Pierce, A., 2009. Impression management: Developing and illustrating a scheme of analysis for narrative disclosures – a methodological note. *Accounting, Auditing & Accountability Journal*, 22 (5), 789-832.

- Bukh, P. N., Nielsen, C., Gormsen, P. and Mouritsen, J., 2005. Disclosure of information on intellectual capital in Danish IPO prospectuses. *Accounting, Auditing & Accountability Journal*, 18 (6), 713 -732.
- Campbell, D., 2000. Legitimacy theory or managerial reality construction? Corporate social disclosure in Marks and Spencer plc corporate reports 1969-1977. *Accounting Forum*, 24 (1), 80-100.
- Campbell, D., McPhail K. and Slack, R., 2009. Face work in annual reports: a study of the management of encounter through annual reports, informed by Levinas and Bauman. *Accounting, Auditing & Accountability Journal*, 22 (6), 907-932.
- Campbell, D. and Rahman, M. R. A., 2010. A longitudinal examination of intellectual capital reporting in Marks & Spencer annual reports, 1978-2008. *British Accounting Review*, 42, 56-70.
- Catasús, B., 2008. In search of accounting absence. *Critical Perspectives on Accounting*, 19, 1004-1019.
- Chalmers, K., Godfrey, J. M. and Lynch, B., 2012. Regulatory theory into the past, present and future of general purpose water accounting standard setting. *Accounting, Auditing & Accountability Journal*, 25 (6), 1001-1024.
- Cho, C. H., Michelon, G. and Patten, D. M., 2012. Impression management in sustainability reports: An empirical investigation of the use of graphs. *Accounting and the Public Interest*, 12, 16-37.
- Choudhury, N., 1998. The seeking of accounting where it is not: Towards a theory of non-accounting in organizational settings. *Accounting, Organizations and Society*, 13 (6), 549-557.
- Clatworthy, M. and Jones, M. J., 2001. The effect of thematic structure on the variability of annual report readability. *Accounting, Auditing & Accountability Journal*, 14 (3), 311-326.
- Clatworthy, M. and Jones, M. J., 2003. Financial reporting of good news and bad news: evidence from accounting narratives. *Accounting and Business Research*, 33 (3), 171-185.
- Clatworthy, M. A. and Jones, M. J., 2006. Differential patterns of textual characteristics and company performance in the chairman's statement. *Accounting, Auditing & Accountability Journal*, 19 (4), 493-511.
- Consumer Council, 2007. *Water and the consumer: driving for a fair deal: A research report by the consumer council into consumer views of water reform*. Belfast: Consumer Council.
- Consumer Council, 2013. *Research into customer perceptions of leakage: Report*. Prepared for Consumer Council Water (reference jn1485/RM/SD): London by SPA Future Thinking.
- Courtis, J. K., 1998. Annual report readability variability: tests of the obfuscation hypothesis. *Accounting, Auditing & Accountability Journal*, 11 (4), 459-471.
- Courtis, J. K., 2004. Corporate report obfuscation: artefact or phenomenon? *British Accounting Review*, 36 (3), 291-312.
- Craig, R. and Amernic, J., 2011. Detecting linguistic traces of destructive narcissism at-a-distance in a CEO's letter to shareholders. *Journal of Business Ethics*, 101 (4), 563-575.
- Crowther, D., Carter, C. and Cooper, S., 2006. The poetics of corporate reporting: Evidence from the UK Water Industry. *Critical Perspectives on Accounting*, 17 (2-3), 175-201.
- Davison, J., 2002. Communication and antithesis in corporate annual reports: A research note. *Accounting, Auditing and Accountability Journal*, 15 (4), 594-608.

- Davison, J., 2008. Rhetoric, repetition, reporting and the “dot.com” era: Words, pictures, intangibles. *Accounting, Auditing and Accountability Journal*, 21 (6), 791–826.
- Davison, J., 2010. [In]visible [in]tangibles: Visual portraits of the business élite. *Accounting, Organizations and Society*, 35 (2), 165-183.
- Davison, J., 2011. Barthesian perspectives on accounting communication and visual images of professional accountancy. *Accounting, Auditing and Accountability Journal*, 24 (2), 250-283.
- Defra, 2008. *Future water: The Government’s water strategy for England*. Cm 7319, London: The Stationary Office.
- Dhanani, A. and Connolly, C., 2012. Discharging not-for-profit accountability: UK charities and public discourse. *Accounting, Auditing and Accountability Journal*, 25 (7), 1140-1169.
- Dhanani, A. and Connolly, C., 2015. Non-governmental Organizational Accountability: Talking the Talk and Walking the Walk. *Journal of Business Ethics*, 129, 613-637.
- Ferguson, J., 2007. Analysing accounting discourse: avoiding the “fallacy of internalism”. *Accounting, Auditing and Accountability Journal*, 20 (6), 912-934.
- Godfrey, J., Mather, P. and Ramsay, A., 2003. Earnings and impression management in financial reports: The case of CEO changes. *Abacus*, 39 (1), 95-123.
- Guardian report by Carrington, D., 2012. *Most water companies not required to cut leaks before 2015 despite drought*. Available from: <http://www.theguardian.com/environment/2012/may/07/water-companies-cut-leaks-2015-drought> [Accessed 14 May 2013].
- Guillamon-Saorin, E., Osma, B.G and Jones, M.J. 2012 Opportunistic disclosure in press release headlines. *Accounting and Business Research*, 42 (2), 143-168.
- Guthrie, J. and Parker, L.D. 1989. Corporate social disclosure: a rebuttal of legitimacy theory. *Accounting and Business Research*, 19 (76), 243-252.
- Hines, R. D., 1988. Financial Accounting: In Communicating Reality, We Construct Reality. *Accounting, Organizations and Society*, 13 (3), 251-261.
- Hopkinson. P., James, P. and Sammut, A., 2000. Environmental Performance Evaluation in the Water Industry of England and Wales. *Journal of Environmental Planning and Management*, 43 (6), 873-895.
- Hopwood, A., 1996. Introduction. *Accounting, Organizations and Society*, 21 (1), 55-56.
- Hrasky, S., 2012. Visual disclosure strategies adopted by more and less sustainability-driven companies. *Accounting Forum*, 36, 154-165.
- IASB, 2010. *IFRS Practice Statement: Management Commentary*, London: IFRS Foundation.
- ICAEW, 2013. *The Journey: Assuring all of the annual report*, London, ICAEW.
- ICAS, 2013. *Balanced and Reasonable: A discussion paper on the provision of positive assurance on management commentary*, Edinburgh, ICAS.
- Jameson, D. A., 2000. Telling the investment story: A narrative analysis of shareholder reports. *The Journal of Business Communication*, 37 (1), 7-38.
- Jones, M. J., 2011. The nature, use and impression management of graphs in social and environmental accounting. *Accounting Forum*, 35 (2), 75-89.
- Kent, P. and Zunker, T., 2013. Attaining legitimacy by employee information in annual reports. *Accounting, Auditing and Accountability Journal*, 26 (7), 1072-1106.
- Kuang, Y. F., Qin, B, and Wielhouwer, J. L., 2014. CEO origin and accrual-based earnings management. *Accounting Horizons*, 28 (3), 605-626.
- Laine, M., 2005. Meanings of the term ‘sustainable development’ in Finnish corporate disclosures, *Accounting Forum*, 29, 395-413.

- Lee, A., Nielson, J. and van der Zahn, J.L., 2007. Is communicating intellectual capital information via internet viable? Case of Australian private and public hospitals. *Journal of Human Resources Costing and Accounting*, 11 (1), 53-78.
- Li, F., 2010. Textual analysis of corporate disclosures: A survey of the literature. *Journal of Accounting Literature*, 29, 143-165.
- Mäkelä, H. and Laine, M., 2011. A CEO with many messages: Comparing the ideological representations provided by different corporate reports, *Accounting Forum*, 35, 217-231.
- Marinovic, I., 2014. Discussion of “equilibrium earnings management and managerial compensation in a multiperiod agency setting”, *Review of Accounting Studies*, 19, 1078-1085.
- McKinstry, S., 1996. Designing the annual reports of Burton PLC from 1930 to 1994, *Accounting, Organizations and Society*, 21 (1), 89-111.
- Merkel-Davies, D. M. and Brennan, N. M., 2007. Discretionary disclosure strategies in corporate narratives: Incremental information or impression management?, *Journal of Accounting Literature*, 26, 116-194.
- Merkel-Davies, D. M. and Brennan, N. M., 2011. A conceptual framework of impression management: new insights from psychology, sociology and critical perspectives. *Accounting and Business Research*, 41 (5), 415-437.
- Merkel-Davis, D. M., Brennan, N. M. and McLeay, S. J., 2011. Impression management and retrospective sense-making in corporate narratives: A social psychology perspective. *Accounting, Auditing and Accountability Journal*, 24 (3): 315-344.
- Neimark, M.K., 1995. *The hidden dimensions of annual reports: sixty years of social conflict at General Motors*, Markus Wiener, Princeton, NJ.
- Neu, D., Warsame, H. and Pedwell, K., 1998. Managing public impressions: environmental disclosures in annual reports. *Accounting, Organizations and Society*, 23 (3), 265-282.
- Ofwat, *Water, today, water tomorrow*. Available from <http://www.ofwat.gov.uk/> [Accessed 14 May 2013].
- Ofwat, 2003. *Security of supply, leakage and the efficient use of water: 2002-03 report*. Birmingham: Ofwat.
- Ofwat, 2004. *Security of supply, leakage and the efficient use of water: 2003-04 report*. Birmingham: Ofwat.
- Ofwat, 2006. *Security of supply, leakage and water efficiency: 2005-06 report*. Birmingham: Ofwat.
- Ofwat, 2007. *Security of supply: 2006-07 report*. Birmingham: Ofwat.
- Ofwat, 2008. *Service and delivery – performance of the water companies in England and Wales 2007 – 2008*. Birmingham: Ofwat.
- Ofwat, 2009a. *Service and delivery – performance of the water companies in England and Wales 2008 – 2009*. Birmingham: Ofwat.
- Ofwat 2009b *Future Water and Sewerage Charges 2010-2015: Final Determinations*. Birmingham: Ofwat.
- Ofwat, 2010 *Service and delivery – performance of the water companies in England and Wales 2009 – 2010*. Birmingham: Ofwat.
- Ofwat, 2011. *Summary of performance 2010-11*. Available from: http://www.ofwat.gov.uk/regulating/prs_web201110perf_rel#leakage [Accessed 14 May 2013].
- Ofwat, 2012. *Performance commentary 2011-12*. Available from: http://www.ofwat.gov.uk/regulating/reporting/rpt_los2012commentary [Accessed 14 May 2013].

- Ogden, S. and Clarke, J., 2005. Customer disclosures, impression management and the construction of legitimacy: corporate reports in the UK privatised water industry. *Accounting, Auditing & Accountability Journal*, 18 (3), 313-345.
- Perols, J. L. and Lougee, B. A., 2011. The relation between earnings management and financial statement fraud. *Advances in Accounting*, 27, 39-53.
- Preston, A. M., Wright, C. and Young, J. J., 1996. Imag[in]ing annual reports. *Accounting, Organizations and Society*, 21 (1), 113-137.
- Rutherford, B. A., 2003. Obfuscation, textual complexity and the role of regulated narrative accounting disclosure in corporate governance. *Journal of Management and Governance*, 7, 187-210.
- Samkin, G. and Schneider, A., 2010. Accountability, narrative reporting and legitimation: The case of a New Zealand public benefit entity. *Accounting, Auditing & Accountability Journal*, 23 (2), 256-289.
- Schrand, C. M. and Walther, B. R., 2000. Strategic benchmarks in earnings announcements: the selective disclosure of prior-period earnings components. *The Accounting Review*, 75 (2), 151-177.
- Scott, W. R., 2012. *Financial Accounting Theory*. Sixth Edition. Pearson, Toronto, Canada.
- Select Committee on Public Accounts. 2001. *Eighth report: Leakage and water efficiency*. London: Parliament. Available from: <http://www.publications.parliament.uk/pa/cm200102/cmselect/cmpubacc/397/39702.htm> [Accessed 13 March 2014].
- Solomon, J. F. and Solomon, A. 2006. Private Social, Ethical and Environmental Disclosure. *Accounting, Auditing & Accountability Journal*, 19 (4), 564–591.
- Stanton, P. and Stanton, J., 2002. Corporate annual reports: research perspectives used. *Accounting, Auditing & Accountability Journal*, 15 (4), 478-500.
- Striukova, L., Unerman, J. and Guthrie, J., 2008. Corporate reporting of intellectual capital: evidence from UK companies. *British Accounting Review*, 40 (4), 297-313.
- Sydserrff, R. and Weetman, P., 2002. Developments in content analysis: a transitivity index and DICTION scores. *Accounting, Auditing & Accountability Journal*, 15 (4), 523-545.
- Tedeschi, J. T. and Melburg, V., 1984. Impression management and influence in the organization. *Research in the Sociology of Organizations*, 3, 31-58.
- Yuthas, K., Rogers, R., and Dillard, J. F., 2002. Communicative action and corporate annual reports. *Journal of Business Ethics*, 41, 141-157.

Figure 1: A framework for impression management

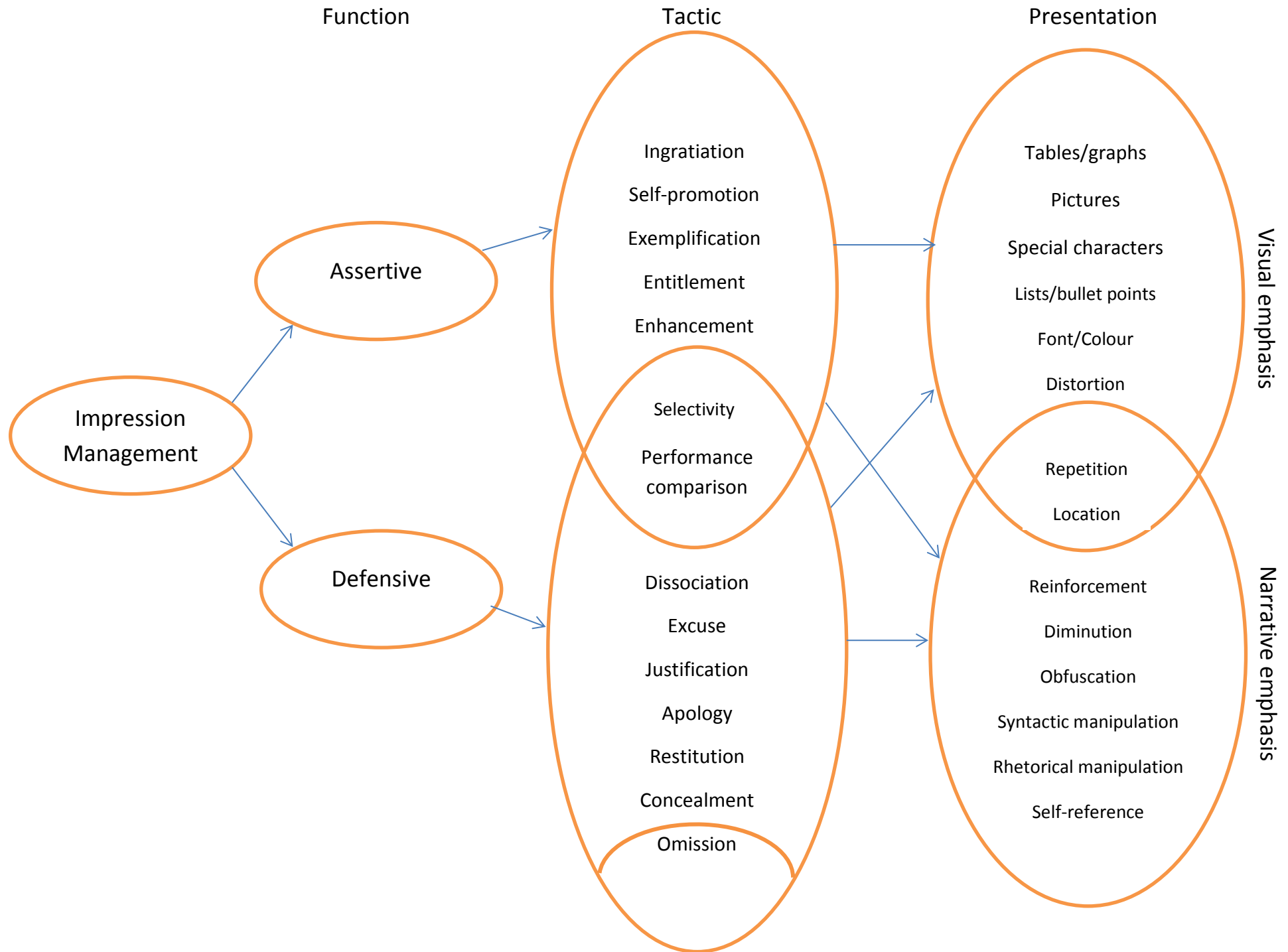


Table 1: Definitions of Impression Management Tactics.

TACTIC	Definition	Sources
Assertive		
Ingratiation	An organisation's management seeks to gain the audience's approbation by praising and flattering them or by expressing similar beliefs, values and attitudes.	Tedeschi and Melburg (1984), Ogden and Clarke (2005).
Self-promotion	An organisation's management promotes their own competence, qualities, abilities and experience.	Tedeschi and Melburg (1984), Arndt and Bigelow (2000).
Exemplification	An organisation's management seeks to be perceived as morally virtuous and conforming to principled ideals and conduct.	Tedeschi and Melburg (1984), Ogden and Clarke (2005).
Entitlement	An organisation's management claims responsibility for positive events and outcomes.	Tedeschi and Melburg (1984), Aerts (2005), Brennan et al. (2009).
Enhancement	An organisation's management claims that the value of a positive event is greater than thought and/or achieved despite negative external influences.	Tedeschi and Melburg (1984), Aerts (2005).
Assertive or Defensive		
Selectivity	An organisation's management selects performance numbers to portray it in the best possible light.	Godfrey et al. (2003), Brennan et al. (2009).
Performance comparisons	An organisation's management select benchmarks that portray current performance favourably.	Brennan et al. (2009).
Defensive		
Dis(as)sociation	An organisation's management distances itself from events with negative implications often by initiating change in personnel.	Ogden and Clarke (2005), Samkin and Schneider (2010).
Excuses	An organisation's management denies responsibility for an event with negative implications by blaming external factors beyond their control.	Tedeschi and Melburg (1984), Benoit (1995), Arndt and Bigelow (2000), Ogden and Clarke (2005), Brennan et al. (2009).
Justifications	An organisation's management accepts at least partial responsibility for an event, but does not accept the attribution of any negative implications.	Tedeschi and Melburg (1984), Ogden and Clarke (2005), Brennan et al. (2009).
Apologies	An organisation's management accepts at least partial responsibility for an event with negative implications and expresses some remorse.	Tedeschi and Melburg (1984), Benoit, 1995, Ogden and Clarke (2005).
Restitution	An organisation's management compensates a victim to avoid any appearance of injustice or unfairness which lead to negative impressions.	Tedeschi and Melburg (1984).
Concealment	An organisation's management obfuscates or downplays negative information by giving it less prominence.	Brennan et al. (2009), Merkl-Davies et al. (2011), Dhanani and Connolly (2012).
Omission	An organisation's management withhold negative information.	Adams (2004), Belal and Cooper (2011), Boiral (2013)

Table 2: Empirical studies of Impression Management in Annual Reports and Sustainability Reports

Author and year	Research method	Sample	Longitudinal data?	Content analysed
Abrahamson and Park (1994)	Quantitative	US listed companies' President's letters	No - cross sectional	Text
Aerts (1994)	Quantitative	Belgian companies' annual reports	No - cross sectional	Attributional statements
Aerts (2001)	Quantitative	Belgian companies' annual reports	Yes	Attributional statements
Aerts (2005)	Quantitative	Belgian companies' annual reports	No – cross sectional	Attributional statements
Arndt and Bigelow (2000)	Qualitative	US hospitals' annual reports	No – cross sectional	Text
Beattie and Jones (2000a)	Quantitative	UK listed companies' annual reports	Yes	Graphs
Beattie and Jones (2002)	Quantitative	Company annual reports from 6 countries	No – cross sectional	Graphs
Beattie et al. (2008)	Quantitative	UK listed companies' annual reports	Yes	Graphs and structure of annual reports
Cho et al. (2012)	Quantitative	US companies' sustainability reports	No – cross sectional	Graphs
Clatworthy and Jones (2001)	Quantitative	UK listed companies' chairman's statements	No – cross sectional	Text - readability
Clatworthy and Jones (2003)	Quantitative	UK listed companies' chairman's statements	No – cross sectional	Text
Clatworthy and Jones (2006)	Quantitative	UK listed companies' chairman's statements	No – cross sectional	Text
Courtis (1998)	Quantitative	Hong Kong listed companies chairman's statements	No – cross sectional	Text - readability
Courtis (2004)	Quantitative + experiment	Hong Kong companies' annual reports	Yes	Colour
Dhanani and Connolly (2012)	Quantitative	Large UK charities' annual reports and annual reviews	No – cross sectional	Text
Godfrey et al. (2003)	Quantitative	Australian listed companies' financial reports	Yes	Graphs
Hrasky (2012)	Quantitative	Australian listed companies' sustainability reports	No – cross sectional	Graphs and photographs
Jones (2011)	Quantitative	UK companies' sustainability reports	No – cross sectional	Graphs
Merkel-Davis et al. (2011)	Quantitative	UK listed companies chairman's statements	No – cross sectional	Text
Neu et al. (1998)	Quantitative	Canadian listed companies' annual reports	Yes	Text
Ogden and Clarke (2005)	Mixed	UK WASCs' annual reports	Yes, but no time series analysis	Text
Preston et al. (1996)	Qualitative	US companies' annual reports	Yes, but no time series analysis	Visual images
Samkin and Schneider (2010)	Qualitative	NZ public sector annual reports	Yes	Text and photographs

Table 3: WASC performance against OFWAT target.

WASC	Years target achieved	Years target not met
Anglian	2006-2010; 2012	2011
Dŵr Cymru	2006-2010; 2012	2011
Northumbrian	2006-2009; 2012	2010 and 2011
Severn Trent	2008-2010; 2012	2006 and 2007; 2011
South West (Pennon)	2006-2012	N/A
Southern	2006-2009; 2012	2010 and 2011
Thames	2007-2012	2006
United Utilities	2007-2012	2006
Wessex	2006-2012	N/A
Yorkshire	2006-2009; 2012	2010 and 2011

Table 4: OFWAT and matched WASC reporting (Thames and United Utilities): 2005-06 and 2006-07.

OFWAT Reporting	Company leakage reporting	
2005-06 targets not met.	Thames	United Utilities
<p>Thames: This year, we have taken formal action against Thames Water, the company with the worst record on leakage control for its continuing failure to hit its leakage target (p.5).</p> <p>Of the three companies that failed their targets in 2005-06, we have taken the strongest action against Thames. The company has given us a legally binding undertaking to meet future leakage targets and to spend an extra £150 million at its own cost to replace an additional 368 km of mains (p.8).</p> <p>United Utilities: This is the fourth consecutive annual target failure reported by United Utilities. United Utilities is now performing in line with its recovery action plan (p. 37).</p> <p>In 2005-06, United Utilities reported that leakage fell by 22 MI/d to 477 MI/d – a reduction of 4.4%. This was above the annual average target of 470 MI/d. Despite missing the annual average target, the company did meet all the interim targets for 2005-06 set within its action plan (p. 47).</p>	<p>Whilst there has been progress during the year in tackling leakage and sewer flooding, it is acknowledged that more needs to be done... We are also encouraging customers to think carefully about their use of water (Water Resources pp. 3-4).</p> <p>Reporting of performance against OFWAT target: Omission of target and actual performance. Omission of failure to achieve target. No visual effects.</p>	<p>Looking beyond the financial bottom-line, the board has been pleased with progress on important areas such as customer service and leakage. (Chairman's Review, p. 2).</p> <p>Graphic with large colour green and blue bold font showing: Spot leakage as at 31 March 2006 470 MI/d 31 March 2005: 519 MI/d (Business Overview, p. 5).</p> <p>Leakage and water efficiency In north west England, United Utilities Water has halved water leakage since 1995 and met its spot target of 470 MI per day at the end of 2005/06. (Corporate Responsibility, p.30).</p> <p>Reporting of performance against OFWAT target: Omission of target and actual performance. Omission of failure to achieve target. Prominent visual effect (graphic) font, colour. Selective measurement of spot data and performance comparison to prior year. Self-promotion on leakage progress.</p>
2006-07 targets met.	Thames	United Utilities

<p>Thames: Thames has achieved the targets set for 2006-07, and we will continue to monitor its performance closely until the undertaking comes to an end in 2010 (p. 2).</p> <p>We secured a legally binding undertaking from Thames in 2005-06 that committed the company to improving its performance, at its own expense, and delivering a score of 100 against its planned level of service by 2009-10. Thames has achieved its target for the first year of the undertaking, largely through a combination of lower leakage and better demand management (p.4).</p> <p>United Utilities: Other companies that failed their 12-month rolling average targets in 2005-06, United Utilities hit their target in 2006-07 (p. 7).</p>	<p>Meeting the leakage target to 31 March 2007 was essential and I am pleased to say that this milestone was achieved, by a considerable margin (Chairman's introduction, p. 3).</p> <p>Key outputs include meeting annual targets for leakage. (Operating Review, p.9)</p> <p>The failure to meet the 2005/06 leakage target, while needing to impose a hosepipe ban as a result of the drought, led to much critical comment from the media and other stakeholders. (Operating Review, p.9)</p> <p>The Company has delivered leakage savings that have met the required target for 2006/07, by a considerable margin.... This is gratifying for the Company, and particularly for the individuals whose efforts have made it possible. (Operating Review, p. 10).</p> <p>KPI table including actual leakage performance against OFWAT target and prior year actual (p. 29).</p> <p>Reporting of performance against OFWAT target: Prominent location of disclosure of meeting target, subsequently repeated three times. Entitlement, self-referencing and reinforcement of meeting target Disclosure of prior year target failure. Visual effect (table) showing target and actual performance and comparison with prior year.</p>	<p>KPI table showing average annual leakage compared to prior year (restated for 2005-06 comparative) (Business Review, p. 2).</p> <p>We are already seeing some improvement in meeting our leakage performance target set by Ofwat (Chief Executive's Report, p.5).</p> <p>Blue bubble graphic with large colour font showing: 468Ml/d rolling annual average leakage We have achieved our economic level of leakage rolling target (Chief Executive's Report. p. 6).</p> <p>Leakage level reduced to 468 megalitres per day (Performance summary, p. 28).</p> <p>Security of water supply – U UW met the economic level of leakage rolling target of 470 megalitres per day for 2006/07 for the first time in five years. (Business Review, p.28).</p> <p>Leakage In north west England, we have halved water leakage since 1995 and out-performed the rolling average target of 470 Ml per day for 2006/07 by achieving 468 Ml per day, meeting our agreed target with Ofwat. (Corporate Responsibility, p. 35).</p> <p>Reporting of performance against OFWAT target: Prominent visual effect (table) showing actual performance and comparison (restated) with prior year. Visual effect (graphic), colour and font of target achievement. Prominent location of disclosure of meeting target,</p>
--	--	---

		subsequently repeated four times and reinforced. Entitlement and self-referencing of meeting target. Disclosure of prior year target failure. Visual effect (bullet point and bold) on performance summary.
--	--	--

Table 5: OFWAT and matched WASC reporting (Severn Trent): 2005-06 to 2007-08.

OFWAT Reporting	Severn Trent leakage reporting
2005-06 target not met.	2005-06 target not met.
<p>The company's performance reflects its failure to achieve its leakage target. Should the company fail to deliver this output, we will make an appropriate adjustment to reflect the financial value of the shortfall at the next review of price limits in 2009 (p. 20).</p> <p>We will continue to meet with Severn Trent on a regular basis in the coming year and monitor progress closely. Severn Trent is on notice that we will consider using our formal enforcement powers in the event of any future failures (p. 47).</p>	<p>The one area of the AMP4 contract where our 2005/06 results were disappointing was leakage. The dry summer of 2005 contributed to this performance, causing higher than average levels of burst pipes. Reported actual leakage has increased by approximately 17 Megalitres per day, 3% greater than 2004/05. We have now increased the resources dedicated to detection and reduction of leakage, and we believe that, by the end of the AMP4 period, we can reduce our leakage figures to below the target level set by Ofwat. (Performance Review, p. 17).</p> <p>Reporting of performance against OFWAT target: Omission of target and actual performance. Obfuscation of failure to achieve current year target and target attainment within regulatory period. Excuse and justification of weather as causal factor. No visual effects.</p>
2006-07 target not met.	2006-07 target not met.
<p>This year we have taken action against Severn Trent over its deteriorating security of supply and the failure to meet its annual leakage target for the second year in succession. We secured a legal undertaking from the company that commits it to achieve future leakage and security of supply index targets until 2009-10. (p. 2).</p> <p>The company is now committed to overcoming scheme delays and spending an extra £45 million on reducing leakage, at shareholders' expense. (p. 6 and repeated on p. 7).</p>	<p>Our leakage increased in the prior year 2005/06.</p> <p>¹We employed more people, invested in new leak detection technology, fixed 37,000 leaks, 8,000 more than the previous year and invested almost £20 million more than the previous year. This effort has reduced our leakage this year but it was not until the month of March 2007 that we attained a monthly level of leakage commensurate with our Ofwat annual target. Therefore, notwithstanding this reduction, we believe that we will not attain the annual average target level of leakage.</p> <p>We have kept Ofwat fully informed of our progress...In due course we will be discussing with Ofwat our ongoing plans and commitments to maintain our progress in reducing leakage. (Chief Executive's Review, p. 7).</p>

¹ All of the selected disclosure is repeated verbatim on page 14 (Business Review).

<p>We will monitor Severn Trent's performance closely through audited quarterly reports, and will take further enforcement action if it fails to deliver its commitments (p. 7).</p>	<p>Leakage table showing current year only (DMA) (page 8).</p> <p>Reporting of performance against OFWAT target: Selectivity and prominent disclosure of prior year poor performance (increase in leakage) and current year leakage reduction. Disclosure over likely failure to meet target. Omission of target and actual performance. Visual effect (table), selective measurement (monthly District Metered Areas, DMA) for current year only. Repetition of leakage reduction.</p>
<p>2007-08 target met.</p>	<p>2007-08 target met.</p>
<p>Severn Trent passed its leakage target this year, after two years of failures. In 2007, we secured a legally binding undertaking from the company to meet its reduction targets. It has made significant reductions this year, and we are pleased with how the company has progressed. We will continue to monitor the company's performance closely against the undertaking during 2008-09 through audited quarterly reports (p. 23).</p>	<p>Large bold blue colour font showing: Delivering results</p> <ul style="list-style-type: none"> • Outperformed against Ofwat 2007/08 leakage target (Inside front cover). <p>Leakage We have outperformed our Ofwat target for 2007/08 having failed to meet this measure for the previous two years. (Chief Executive's Review, p.6).</p> <p>Colour graphic with large blue colour font showing: KPI highlights: Leakage MI/d 491 (large font) We have outperformed our leakage target (KPI highlights p.10)</p> <p>KPI table including leakage (p. 11).</p> <p>Meeting our leakage target We have outperformed our leakage target for 2007/08, after failing to meet it for the last two years. We are determined to maintain our performance...in line with our written commitment to Ofwat for the remaining years of AMP4. (Performance Review, p.16).</p> <p>Reporting of performance against OFWAT target: Prominent location and visual effect (font, colour, bullet) of meeting target.</p>

	<p>Repeated prominent location of disclosure of meeting target, entitlement and self-referencing, subsequently repeated two times.</p> <p>Reinforcement of meeting target.</p> <p>Disclosure of prior year target failures.</p> <p>Visual effect (graphic, colour, font) to show actual performance and exceeding target, reinforcement, entitlement and self-referencing.</p>
--	--

Table 6: All targets met –leakage disclosure: 2005-06 to 2007-08.

Pennon	Wessex
<p>2005-06 The company's leakage detection and reduction programme continues to deliver results in line with mandatory targets set by Ofwat (Chairman's Statement, p. 2)</p> <p>The company...has consistently met its Ofwat leakage target of 84 MI/d (Business Review, p. 18).</p>	<p>2005-06 We have maintained leakage below the regulatory target and do not anticipate any supply problems in 2006 (Operational Review p. 2)</p> <p>Service to customers – KPI table comparing actual leakage with prior year and target (p. 11)</p>
<p>2006-07 We achieved our best ever leakage performance. We have achieved or beaten our leakage target in every year since targets were introduced by Ofwat in 1999/2000 (Chief Executives Review, p.4).</p>	<p>2006-07 Reduced leakage below the target assessed for the 2004 price review to 72 MI/d (Highlights, p. 4).</p> <p>Reducing leakage to 72 MI/d – which is 2 MI/d below the economic level (Regulatory Commentary, p. 34) and OFWAT June return table comparing actual leakage with prior year and target.</p>
<p>2007-08 We achieved our target of keeping leakage at or below 84MI/d. We have achieved or beaten our leakage target in every year since targets were introduced by Ofwat in 1999/2000 (Chief Executives Review, p.4).</p>	<p>2007-08 Leakage is currently 72MI/d beating the Ofwat target of 74MI/d. (Customer services, p.13).</p> <p>Service to customers – KPI table comparing actual leakage with prior year and target (p. 31)</p>
<p>Reporting of performance against OFWAT target: Consistent, clear and prominent reporting of target achievement. Little variation in annual disclosure. Evidence of consistent use of visual effect (tables) to show leakage performance against target and prior year.</p>	

Table 7: OFWAT and matched WASC reporting (Severn Trent): 2008-09 to 2011-12.

OFWAT Reporting	Company reporting
2008-09 to 2009-10: Targets met in all years.	2008-09 to 2009-10: Targets met in all years.
No additional leakage reporting.	<p>2008-09 Severn Trent is delivering performance in key areas:</p> <ul style="list-style-type: none"> • Outperforming our leakage target (Highlights, p.1). <p>KPI table showing leakage against prior year (Business Review, p. 8).</p> <p>Meeting our leakage target: Our leakage was 492 MI/d in 2008/09. For the second year running...we have met our leakage target of 500 MI/d set by Ofwat.... being able to reduce leakage becomes ever more important for our customers (Business Review, p. 10).</p> <p>2009-10 For the third year running we achieved our leakage target (Business Review, p.10)</p> <p>KPI table showing leakage against prior year (Business Review, p. 11).</p> <p>...able to achieve Ofwat's leakage target for the third successive year (2010, Business Review, p. 12).</p> <p>Reporting of performance against OFWAT target: Consistent and prominent reporting of target achievement. Repetition of meeting target. Consistent use of visual effect (table) to show leakage performance against prior year and industry quartile. Reinforcement and emphasis of meeting leakage target.</p>
2010-11 target not met.	2010-11 target not met.
Despite the cold winter of 2010-11, most companies met their leakage targets. But six companies (Southern Water, Yorkshire Water, Northumbrian Water – in its north-east operating	<p>Leakage was above target as a result of the severe winter weather....We maintained our leakage at the same level as last year (Business Review p.7).</p> <p>Large graphic with large green (current year) and grey (prior year) colour font showing:</p>

<p>area – Severn Trent Water, Anglian Water and Dŵr Cymru) failed.</p> <p>Dŵr Cymru, Severn Trent Water and Northumbrian Water (in its north east operating area) will each provide us with reports every three months on their performance. This is so we can require them to take further action quickly if their performance does not improve.</p>	<p>Leakage – megalitres per day (Ml/d) 497: 2011; 497: 2010 (large font and bold) (Business Review, p. 12)</p> <p>Reducing leakage (green and bold font) We were able to maintain leakage at last year’s levels of 497 megalitres per day (Ml/d). However, despite deploying additional resources we were unable to achieve our leakage target of 483 Ml/d as a direct result of the weather.</p> <p>Colour graph of ‘Winter peaks 2007/08 to 2010/11: Weekly leakage April 2007 to March 2011’ showing increased peaks particularly in the winter of 2010/11 (a peak of approximately 800Ml/d, compared to a peak of approximately 650Ml/d in the winter of 2009/10 and peaks of less than 600Ml/d in earlier years) (Business Review, p. 13)</p> <p>KPI table showing leakage against prior year (p. 123).</p> <p>Reporting of performance against OFWAT target: Entitlement and performance comparison against prior year. Prominent visual effect (graphic, font, colour) to emphasise performance against prior year Disclosure of failure to achieve target. Excuse and justification of weather as causal factor, repeated a further six times. Visual effect (graph, colour) to emphasise weather. Visual effect (table) and disclosure performance comparison to prior year.</p>
<p>2011-12 target met.</p>	<p>2011-12 target met.</p>
<p>No additional leakage reporting.</p>	<p>Bold and bullet: Leakage reduced 7% year on year to a record low level and below OFWAT target (Highlights: Inside front cover and repeated Chairman’s Statement , p. 2)</p> <p>We have met our leakage targets: Large graphic of leakage levels with large bold font for current year leakage 464 Ml/d. (Chief Executive’s review, p. 5).</p> <p>Leakage was reduced to a new low, ahead of our target (Chief Executive’s review, p. 6).</p>

	<p>Colour graphic with large blue colour font showing: Meeting leakage targets: We have achieved our lowest levels of leakage ever, and have beaten our Ofwat target of 474 MI/d by 10 MI/d (2%) Lowest levels of leakage achieved (Keeping customers happy: Business Review, p.15).</p> <p>Severn Trent is the only company to have targeted a significant reduction in leakage during AMP5. We were pleased to improve our performance again during the year. We cut leakage to 464 megalitres per day (MI/d), compared to 497 MI/d last year and our target of 474 MI/d (Deploying water resources, p. 18).</p> <p>KPI table showing leakage against prior year page (p.139).</p> <p>Reporting of performance against OFWAT target: Prominent location and visual effect (bold, bullet) of disclosure of meeting target. Prominent reporting of target achievement, entitlement, repeated six times. Entitlement, reinforcement and visual effect (graphic, colour, font, italics) of meeting leakage target. Exemplification of leakage reduction in AMP5 period. Performance comparison to prior year and target Visual effect (table) of leakage compared to prior year.</p>
--	---

Table 8: OFWAT and matched WASC reporting (Southern, Northumbrian and Yorkshire): 2005-06 to 2011-12.

OFWAT Reporting	Examples of company leakage reporting		
Prior years targets met (2006-09).	Southern	Northumbrian	Yorkshire
No additional leakage reporting.	<p>All years 2006-09, leakage tables showing year on year actual leakage since 2006 and next year's target level.</p> <p>All years 2006-09, disclosure of achieving leakage target and low industry levels on leakage.</p>	<p>Leakage targets achieved (2008, Highlights, p.1 and very similar in 2006 and 2007).</p> <p>Table showing comparison of actual levels with prior year and OFWAT leakage target (2007, p22 and 2008, p.22, repeated p.30).</p> <p>The leakage targets agreed with Ofwat have been met.... NWL...is playing a leading role in a review of leakage methodologies with the EA and Ofwat. (2009, Business Review, p.29).</p>	<p>We achieved our leakage target for the tenth year running. (2008, Managing Director's Review, p.1).</p> <p>We have achieved Ofwat's leakage target for the tenth year running (2008, Business Review, p.5)</p> <p>We had a good year in terms of leakage reduction... turning out at 295MI/d and we out-performed our regulatory target of 297.1MI/d (2009, Business Review, p 5).</p>
	<p>Common reporting of performance against OFWAT target:</p> <p>Consistent disclosure of meeting target.</p> <p>Performance comparison of target attainment and actual leakage levels.</p> <p>Visual effect (tables) showing target and actual performance and comparison with prior year.</p> <p>Repetition of meeting target.</p>		
2009-10 targets not met.	Southern	Northumbrian	Yorkshire
Most companies met their leakage targets, in spite of the unusually cold winter conditions. However, Southern, Northumbrian (and) Yorkshire failed to	Southern Water's aim is to beat annual leakage targets set by Ofwat (92 MI/d for 2009-10) maintaining its position as the water and sewerage company with the lowest leakage levels in the industry, measured on a per property basis	The severe freeze...meant we, along with other companies, did not meet our annual targets this year although our three year rolling targets have again been met. (Operational Performance, p.35)	<p>Our aim is to be OFWAT's frontier company for financial performance and to outperform our targets. (2010 Business Review, p. 6).</p> <p>Reporting of performance against</p>

meet their targets. We have focused on what these companies need to do to restore their performance and we have increased their reporting requirements while they do so.	<p>(Operating and Financial Review, p.4).</p> <p>Leakage table showing year on year actual leakage since 2006 and next year's target level.</p> <p>Reporting of performance against OFWAT target: Obfuscation of failure to achieve target. Table to show prior year performance and future leakage target. Self-promotion and selectivity of measurement for industry positioning.</p>	<p>Reporting of performance against OFWAT target: Obfuscation of failure to achieve target, through selectivity of attaining rolling targets and annual average measures. Excuse and justification of weather as causal factor. Diminution of failure by reference to other WASCs. No tables or other visual effects.</p>	<p>OFWAT target: Omission of target and actual performance. Omission of failure to achieve target. Self-promotion of regulatory positioning. No tables or other visual effects.</p>
2010-11 targets not met.	Southern	Northumbrian	Yorkshire
<p>Despite the cold winter of 2010-11, most companies met their leakage targets. But six companies (Southern Water, Yorkshire Water, Northumbrian Water – in its north-east operating area – Severn Trent Water, Anglian Water and Dŵr Cymru) failed.</p> <p>Dŵr Cymru, Severn Trent Water and Northumbrian Water (in its north east operating area) will each provide us with reports every three months on their performance. This is so we can require them to take further action quickly if their</p>	<p>Following three harsh winters...as a result we have been unable to achieve the challenging leakage targets that we set for ourselves, though we continue to have the lowest leakage levels of any of the ten water and sewerage companies in England and Wales... we remain committed to leading the industry on leakage (Operating and Financial Review, p.4).</p> <p>Southern Water's aim is to beat annual leakage targets agreed with Ofwat. The target was 83 MI/d for 2010-11. We are very disappointed to report that, despite finding and repairing a record 22,000 leaks during the year, we have not met this target, with levels for the year being at 92 MI/d... We are discussing these</p>	<p>Yet again, the weather had a huge impact on our operations during the year. The worst winter in over 100 years posed many challenges for us. Due to the extraordinary work of teams across the company, supplies to our customers were not affected. I must pay tribute to those who worked in exceptionally hard conditions to guarantee supplies and to deal with the inevitably increased leakage quickly, although, in these circumstances, it was not possible to achieve our leakage target in the north. (Chairman's Statement, p. 5)</p> <p>Table showing leakage targets for 2011-12 only, no current year figures (p. 12).</p> <p>The severe freeze....as a result, we,</p>	<p>Within a month we began implementing the plan with a view to reducing leakage to 297MI/d by the end of the financial year. However with the cold winter weather of 2010/11 turning out to be even worse than that of the previous year, we finally out-turned at 325MI/d. (Business Review, p. 7).</p> <p>Reporting of performance against OFWAT target: Disclosure of actual performance. Obfuscation of failure to achieve target. Excuse and justification of weather. No tables or other visual effects.</p>

performance does not improve.	<p>issues with Ofwat and hope to agree a revised target profile.</p> <p>Table showing current and past leakage performance showing improvement from prior year. (No targets shown)</p> <p>However, even at the reported level, our leakage levels remain the lowest of the ten water and sewerage companies in England and Wales (Operating and Financial Review, p.6).</p> <p>Reporting of performance against OFWAT target: Disclosure of target and actual performance. Disclosure of failure to achieve target Excuse and justification of weather as causal factor. Visual effect (table) but changed format showing current and prior year performance only – omission of target data as prior years. Self promotion and repetition of industry positioning.</p>	<p>along with other companies, did not meet our annual leakage target. In our southern region, conditions were not quite so severe and we achieved our target. (Operational Performance, p.39).</p> <p>Reporting of performance against OFWAT target: Disclosure of failure to achieve target, but diminution by reference to other WASCs. Excuse and justification of weather as causal factor, repetition. Visual effect (table) showing leakage target only.</p>	
2011-12 targets met.	Southern	Northumbrian	Yorkshire
No additional leakage reporting.	In terms of leakage we recorded our lowest figure ever and beat the current target set by our regulator OFWAT by 11 Ml/d. We remain the water and sewerage company with the lowest leakage level (Chief Executive's review,	<p>Table showing comparison of actual levels with OFWAT leakage target (Business Review, p. 8).</p> <p>Throughout 2011/12, distribution input and leakage levels have been at their</p>	The success we achieved in driving down leakage ... During 2011-12 we put significant additional resource into tackling leakage and reduced levels in our region to the lowest on record. (Chairman's Review, p.1).

	<p>p.3).</p> <p>Leakage table showing six year comparison of actual leakage levels. (Operating review, p. 7).</p> <p>Reporting of performance against OFWAT target: Prominent disclosure of meeting target. Repetition (four times), entitlement and reinforcement of meeting target. Self-promotion and repetition (four times) of industry positioning. Visual effect (table) showing current and prior year performance.</p>	<p>lowest ever. Our final reported leakage figure has met our target comfortably (Environment, p.17).</p> <p>Reporting of performance against OFWAT target: Visual effect (table) to show target and actual performance. Entitlement and reinforcement of meeting target.</p>	<p>Comfortably over achieve the leakage target of 297 Ml/d and achieve the lowest ever levels. (Business Review, p. 4).</p> <p>Table showing comparison of actual levels with prior year and OFWAT leakage target. (Business Review, p. 4).</p> <p>Reporting of performance against OFWAT target: Prominent disclosure of meeting target. Visual effect (table) to show target and actual performance current and prior year. Repetition and reinforcement of meeting target.</p>
--	---	---	---

Table 9: OFWAT and matched WASC reporting (Anglian and Dŵr Cymru): 2009-10 to 2011-12.

OFWAT Reporting	Company leakage reporting	
2009-10 targets met.	Anglian	Dŵr Cymru
<p>No additional leakage reporting.</p>	<p>We met leakage target despite severe weather. Column chart showing current year (2009/10 5.62m³/km/day in blue colour) and prior years leakage to 2005/06 (5.80 m³/km/day) in grey colour. (KPI review, p. 4).</p> <p>For the ninth year in succession, we have once again met our demanding targets on reducing leakage (Managing Director's Statement, p. 6).</p> <p>We have one of the best records for leakage control in the UK water industry, meeting all our AMP4 targets and with water loss figures at around half the industry average. In spite of the severe winter weather of 2009/10, we maintained our service levels and met our leakage target of 211.2 Ml/d (Business Review, p.31)</p> <p>Reporting of performance against OFWAT target: Prominent location of disclosure of meeting target, subsequently repeated three times. Entitlement and reinforcement of meeting target Visual effect (column chart), actual performance and comparison with prior year. Performance comparison and self-promotion of industry positioning</p>	<p>Last year we again achieved OFWAT's leakage reduction target (Managing Director's report, p. 2).</p> <p>KPI table comparing leakage against prior year and target. Tick boxes for respective performance. (Business Review, p. 7).</p> <p>In 2009-10 we met our mandatory target for leakage reduction, and over the last five years we have reduced by 33 mega litres per day (ml/d) or 15%. This means that leakage in our region, once one of the highest in the UK, is now in line with the industry average (Business Review, p. 15).</p> <p>Reporting of performance against OFWAT target: Prominent location and entitlement of meeting target, subsequently repeated three times. Visual effect (table and tick box) to show actual performance, target and comparison with prior year. Self-promotion of industry positioning.</p>
2010-11 targets not met.	Anglian	Dŵr Cymru
<p>Despite the cold winter of 2010-11, most companies met their leakage targets. But six</p>	<p>Our leakage rates are consistently almost half the industry average.</p>	<p>Last year leakage was 199Mld (mega litres a day), 9Mld above target and 3% higher than the previous</p>

<p>companies (Southern Water, Yorkshire Water, Northumbrian Water – in its north-east operating area – Severn Trent Water, Anglian Water and Dŵr Cymru) failed.</p>	<p>Column chart showing current year (2010/11 6.10 m³/km/day in pink colour) and prior years leakage to 05/06 (5.80 m³/km/day) and industry average for 2009/10 (10.9 m³/km/day) in orange colour. (KPI review, p. 4).</p> <p>In contrast to some other areas of the UK, we maintained supplies to our customers, which included increasing water put into supply and maintaining or increasing pressure to guarantee water supplies. As a consequence our total leakage for 2010/11 was 229 Ml/d; which was above our target in the north of the region where the conditions were most severe. However, in the south east of the region leakage levels were lower than last year. Our underlying leakage levels remain amongst the lowest in our sector; we have met our leakage targets for the last eight years (Business Review, p. 29).</p> <p>Reporting of performance against OFWAT target: Concealment of target failure and claims of meeting target by region or historically. Visual effect (table), actual performance, comparison with prior year and industry average. Performance comparison and self-promotion of industry positioning repeated three times.</p>	<p>year. Over the last 16 years we have reduced our leakage by more than half from 413 Ml/d to 199 Ml/d. (Managing Director's Report, p. 4).</p> <p>KPI table comparing leakage against prior year with tick box (Business Review, p.7). No target figure.</p> <p>The last winter was one of the harshest on record and for the first time since targets were introduced by Ofwat we did not meet our target for leakage reduction (Our performance, p. 10)</p> <p>Graph (visual effect) showing ten year trend in leakage reduction from 224 Ml/d in 2001-02 to 199 Ml/d in 2010-11 (p. 18).</p> <p>Reporting of performance against OFWAT target: Prominent disclosure of failure to meet target, subsequently repeated three times. Disclosure of actual and target leakage. Table (visual effect), performance comparison with prior year. Excuse and justification of weather Visual effect (graph) to show leakage reduction, obfuscating final year increase (measurement distortion).</p>
2011-12 targets met.	Anglian	Dŵr Cymru
No additional leakage reporting.	<p>Colour graphic with large font showing: 6% in bold and purple colour We beat our leakage target by over 6% this year. (Inside front cover)</p> <p>Beating our leakage target (set by Ofwat) by over 6%</p>	<p>Graph under the caption 'Leakage is at an all time low' showing leakage falling from approximately 250 Ml/d in 2001/02 to less than 200 Ml/d in 2011/12. (Inside front cover)</p> <p>We achieved our target for the year, bringing leakage</p>

	<p>– the lowest ever level of leakage (Highlights, p. 2)</p> <p>Beaten (in purple colour and bold font) our leakage target by over 6% (Performance, p. 4)</p> <p>This year we achieved our best ever performance on leakage to reflect our commitment to securing supply to our customers and protect our environment against potential drought .</p> <p>Table of actual and prior year performance (KPI review, p. 6)</p> <p>Large purple colour water drop graphic with large font showing: Our regulatory target for 2011/12 was beaten by over 6% (Business Review, p. 26)</p> <p>At around half the national average, our leakage level is the lowest ever recorded, making Anglian Water an industry leader for 2011/12 (Business Review, p. 41)</p> <p>Reporting of performance against OFWAT target: Prominent location and visual effects (graphics, colour and font) of disclosure of meeting target, repeated five times. Entitlement and reinforcement of meeting target. Performance comparison and self-promotion of industry positioning. Ingratiation to stakeholders (customers and environment). Visual effect (table), actual performance, comparison with prior year and industry average.</p>	<p>down to a lowest ever level. (Operational Review, p.10)</p> <p>Bar chart under the caption ‘Protecting the Environment: Leakage (Ml/d)’ showing leakage in 2011 at Ml/d: 2012 at 185Ml/d with tick to show comparison (and achievement) with target (Performance Review, p. 20).</p> <p>Reporting of performance against OFWAT target: Prominent location and visual effects (colour and graphics) of disclosure of actual leakage levels, repeated four times. Disclosure of meeting target, repeated three times. Visual effect (graph) showing leakage reduction, rescaled.</p>
--	---	--

Table 10: All targets met –leakage disclosure: 2009-10 to 2011-12.

Pennon	Wessex
<p>2009-10 Despite the coldest winter for nearly 30 years causing a surge in burst pipe incidents for both our customers and network, we still beat our leakage control target of 84 Megalitres per day (Ml/d), and achieved a best ever performance of 82 Ml/d. We have now achieved or beaten our leakage targets every year since they were first introduced by Ofwat in 1999/2000. Our leakage rate remains amongst the lowest in the industry (Chief Executive’s Review, p. 9).</p>	<p>2009-10 Kept leakage within our target level, despite the major increase in bursts caused by the very cold winters this year and last (highlights, p. 1, repeated business Review, p. 5).</p> <p>Service to customers – KPI table comparing actual leakage with cycle average and target (p. 11)</p> <p>Although it remains within our monitoring plan target, leakage increased from 72.2ML/d last year to 73.9ML/d this year as a result of cold conditions at the start of 2010 (p. 17).</p>
<p>2010-11 Highlights of the year: Industry leading performance in tackling leakage (Inside front cover)</p> <p>Our water losses from leakage are the lowest in the country (Chief Executive’s Review, p. 5).</p> <p>2010/11 notable achievements: Successfully met annual leakage target in spite of coldest December in England in the last 100 years,...Industry-leading performance in tackling leakage (Business Review , p. 8)</p> <p>This year the company again successfully met both its annual and three-year rolling leakage targets and has done so ever since leakage targets were originally set by Ofwat (Business Review, p. 10).</p>	<p>2010-11 Despite the prolonged sub-zero temperatures and snow cover during December 2010 and the subsequent rapid thaw in January 2011, we not only cut leakage but also met a challenging new target (Chairman’s Statement p. 1)</p> <p>Cut leakage and met our new leakage target (Highlights, p. 3)</p> <p>Service to customers – KPI table comparing actual leakage with cycle average and target (p. 11)</p> <p>Despite the prolonged sub-zero conditions and snow cover during December 2010 we have cut leakage from 74ML/d and met our new target of 71ML/d (Leakage, p. 20)</p>
<p>2011-12 Highlights of the year: Industry leading performance in tackling leakage (Inside front cover)</p> <p>Best ever leakage results 15th consecutive year without water restrictions. Best ever and industry-leading leakage control performance (Business Review, p.12).</p>	<p>2011-12 We once again beat our leakage target (Highlights, p.3)</p> <p>Service to customers – KPI table comparing actual leakage with cycle average and target (p. 5)</p> <p>Our innovative schemes and our efforts to bring leakage down to 15%, amongst</p>

	the lowest in Europe (p. 35)
Reporting of performance against OFWAT target: Consistent and prominent reporting of target achievement. Self-promotion and performance comparison against industry. Reinforcement and enhancement of performance despite the weather conditions Consistent use of tables or charts to show leakage performance against target and prior year.	